PROFESSIONAL SERVICES PRICING PRACTICES

PREPARED FOR

MARTIN MARIETTA DATA SYSTEMS

MAY 11, 1983

INPUT

FIRMS INTERVIEWED

EDS
INFORMATICS
CSC/INFONET
KEANE ASSOCIATES
GEISCO
LTI
AMERICAN MANAGEMENT SYSTEMS
DATACARE
MC AUTO
ARTHUR ANDERSEN
A.O. SMITH
DASD
SPIRADELLIS
MONCHIK-WEBER
CDC
EDS/FEDERAL SYSTEMS

INTERVIEWEE TITLES

SYSTEMS ENGINEERING MANAGER
VICE PRESIDENT OPERATIONS
MANAGER, PROFESSIONAL SERVICES
MANAGER FINANCE, SYSTEMS DEVELOPMENT & CONSULTANTS
SENIOR VICE PRESIDENT
MANAGER OF GOVERNMENT PROGRAMS
DIRECTOR OF ADMINISTRATIVE SERVICES
MANAGER OF MARKET RESEARCH
PARTNER
DIRECTOR OF PLANNING
SENIOR VICE PRESIDENT OF DEVELOPMENT
CHIEF OPERATING OFFICER
STRATEGIC PLANNER/PROFESSIONAL SERVICES
GROUP VICE PRESIDENT

EXHIBIT

PRIMARY AND SECONDARY PROFESSIONAL SERVICE AREAS

(P=Primary, S=Secondary)

VENDOR	GOVERNMENT				MFG.	BANKING/ FINANCE	HEALTH	OTHER
	COMM'L	FED. ADP	ECS	NON-FED.				
EDS	P				P			P
Informatics	P	P		P	S	P	S	
CSC/Infonet	P				S	P	S	
Keane Assoc.	P				P		S	
GEISCO	P	S			P	P	S	
LTI	P			P	P	P	S	
American Mgmt. Sys.								
Datacare							P	
McAuto	P	P		P	P	P	P	
Arthur Andersen	P	S		S	P	P	P	
A.O. Smith					S	P		
DASD	P				P	P	P	
Spiradellis	P	S	S	S	S	P	P	
Monchik-Weber	S					P		
CDC	P	P	S	S	P	S	P	
EDS/Fed. Sys.		P		P				

EXHIBIT

PRIMARY COMPETITION

VENDOR	COMPETITORS (* = FUTURE)
EDS	*Burroughs, *IBM, *Data General
Informatics	CSC, Planning Research
CSC/Infonet	Other RCS firms - Price; Consulting Cos. - Flexibility
Keane Associates	Computer manufacturers*
GEISCO	In-house, McAuto, Boeing, Tymshare, Rapidata, *IBM, *American Telephone
LTI	Big 8 accounting firms
American Mgmt Sys	Booz Allen, McKinzey, Arthur Andersen, Peat Marwick, *Arthur Young & Co.
Datacare	Technicon
McAuto	Arthur Andersen, Informatics, Boeing, In-house, *Big 8
Arthur Andersen	Big 8, AMS, CSC, EDS, Booz Allen, A.D. Little (a bit)
A.O. Smith	Applied Comms. Inc. (ACI), ANACOMP-Kransley, GEISCO (Bank Systems)
DASD	EDS, CSC, Computer Task Group
Spiradellis	Lambda, CGA, OSI
Monchik-Weber	Consulting - Big 8; Devel. - in-house, body shops and independents, Production - (ADP) any D.P. production services
CDC	*Small education courseware cos. - Micro cos. A.D. Little - established market presence; IBM - reputation, products; Computervision - strong products; McAuto, CSC
EDS/Fed. Sys.	CSC, Planning Research, SDC/Burroughs, CDSI, CACI

1983 RATES
(AVERAGE)

TITLE	RATE
ACCOUNT MANAGER	$101
PROJECT LEADER	79
PRINCIPAL CONSULTANT	97
SENIOR CONSULTANT	91
CONSULTANT	76
PRINCIPAL DESIGNER	69
SR. SYSTEMS ANALYST	60
SYSTEMS ANALYST	50
JR. SYSTEMS ANALYST	45
SR. PROGRAMMER	47
PROGRAMMER	41
JR. PROGRAMMER	39

EXHIBIT

1983 $'s RATES (* = Variance from Definition)

VENDOR	ACCT MGR	PROJ LEAD	PRIN CONS	SR CONS	CONS	PRIN DES	SR SA	SA	JR SA	SR PROG	PROG	JR PROG
EDS	* 55	* 55	* 55	* 55	* 55	* 55	*55	*55	*55	*55	*55	*55
Informatics	60	80	55	50	50	40	37	37	35	40	30	30
CSC/Infonet	N/A	63	70	71.50	63	54	47	39	34	47	39	34
Keane Assoc.	N/A	N/A	37.50	62.50	25	25	25	25	18.75	18.75	18.75	18.75
GEISCO	* 90	* 90	125	105	105	* 80	*80	*70	60	70	60	52.50
LTI												
American Mgmt. Sys.	*117.50	*117.50	117.50	65	55	85	52	42	35	47	35	N/A
Datacare	80	70	90	90	N/A	80	80	70	55	80	70	55
McAuto												
Arthur Andersen	*160	*125	*175	*160	*125	80	*52			*		*
A.O. Smith		* 90	110	110		* 90	*75		65			
DASD		42	65	50	45	42		35	N/A	30	N/A	N/A
Spiradellis	N/A	60	90	80	65	72.50	55	55		45	35	N/A
Monchik-Weber		* 80	100	137.50	100	80	80	65		50	40	
CDC			175	150	131	100	76	65	55	45	41	37
EDS/Fed. Sys.												

IMPORTANCE OF FACTORS ON BILLING RATES (SUMMARY)

FACTOR	IMPORTANCE*
COMPETITION	3.7
COSTS	3.6
TOOLS	3.4
PERSONNEL SHORTAGE	3.2
CUSTOMERS' FINANCES	3.0
INFLATION	2.6
TURNOVER	2.3

* 1 = LOW, 5 = HIGH

EXHIBIT

IMPORTANCE OF FACTORS ON BILLING RATES

VENDOR	INFLATION	TURNOVER	COSTS	CUSTOMERS' FINANCES	PERSONNEL SHORTAGES	COMPE-TITION	TOOLS
EDS	4	2	3	1	1	1	1
Informatics	5	3	5	4	4	4	2
CSC/Infonet	1	1	1	1	4	5	3
Keane Assoc.	1	1	3	5	3	3	5
GEISCO	3	1	2	4	1	4	4
LTI							
American Mgmt. Sys.	3	4	4	2	3	5	4
Datacare		2	5	3	2	4	DK
McAuto	4	1	4	2	3	3	3
Arthur Andersen	2	2	3.5	3	4		1
A.O. Smith	1	1	5	5	5	5	5
DASD	3	5	4	3	4	2	
Spiradellis	2	3	3	4	5	4	5
Monchik-Weber	4	2.5	4	3	4	4	3
CDC	3	1	4	2	2	4	5
EDS/Fed. Sys.	1	5					

BILLING RATE INCREASES
(AVERAGE)

YEAR	INDEX	PERCENT CHANGE
1980	100	–
1981	109	9%
1982	118	8%
1983	123	4%
1984	130	6%

EXHIBIT

BILLING RATE INCREASES (1980 = 100)

VENDOR	1981	1982	1983	1984
EDS	100	110	115	120
Informatics	110	115	115	120
CSC/Infonet	110	120	120	130
Keane Assoc.				
GEISCO	116	130	142	153
LTI				
American Mgmt. Sys.	100	110	110	125
Datacare		20%		Static
McAuto				
Arthur Andersen	110	123	133	136
A.O. Smith				
DASD	110	118	124	
Spiradellis	110	113	121	127
Monchik-Weber	108	122	122	128
CDC	112	119	125	128
EDS/Fed. Sys.	112	120	126	133

EXHIBIT

VARIATIONS FROM STANDARD RATES

VENDOR	CUST. TYPE	APPL. TYPE	AMOUNT OF COMPETITION	GEOGRAPHY	EXPERTISE	OTHER
EDS						
Informatics	X		X		X	
CSC/Infonet						X
Keane Assoc.					X	
GEISCO	X		X			
LTI			X	X		
American Mgmt.						
Datacare			X		X	
McAuto						
Arthur Andersen				X	X	
A.O. Smith	X		X		X	
DASD	X				X	
Spiradellis			X	X	X	
Monchik-Weber						
CDC	X					
EDS/Fed. Sys.						

INPUT

EXHIBIT

DISCOUNTS

VENDOR	YES	NO	DETAILS
EDS		X	
Informatics	X		Rarely.
CSC/Infonet	X		Contracts over $100K.
Keane Assoc.	X		Multiple sales installations or long contracts.
GEISCO	X		On site work, long term, meet competition.
LTI			Proprietary.
American Mgmt. Systems	X		Government procurement regulations.
Datacare	X		Assessment of competition and geographic location of client.
McAuto	X		Competitive, size of contract, multi-year.
Arthur Andersen	X		Only if partner or division decide to propose to do work for less, or government contracts.
A.O. Smith		X	
DASD	X		Only on large jobs.
Spiradellis	X		Annual volume discounts, rebate based on turnover.
Monchik-Weber		X	
CDC		X	Four types of hourly volume discounts in all categories.
EDS/Fed. Sys.			Cost build ups - need to demonstrate profit won't exceed certain % of costs.

EXHIBIT

BILLING PRACTICES FOR TASK-ORIENTED WORK

VENDOR	TASK-ORIENTED SAME AS T+M? YES	NO	REASONS
EDS	X		No distinction.
Informatics		X	Task order is higher and includes mgmt. responsibility.
CSC/Infonet	X		Company policy because of volume and % of federal government business.
Keane Assoc.		X	Would benefit customer if project similar to another.
GEISCO	X		Better estimates on module basis.
LTI	X		No tools to reduce time effort.
American Mgmt. Systems	X		Work fixed priced by deliverables.
Datacare	X		Have no reason not to.
McAuto	X		Cost build up rather than value or market pricing.
Arthur Andersen	X		Billing rates related to experience.
A.O. Smith	X		No task to hang dollar on - either FP or T+M.
DASD	X		Majority of work is T+M - easier to treat in same manner.
Spiradellis	X		Cost structures are the same except for contingency factors.
Monchik-Weber	X		Only have one set of rates.
CDC	X		
EDS/Fed. Sys.	X		Costs don't change - same cost basis.

EXHIBIT

FIXED PRICE PROPOSALS

VENDOR	FIXED PRICE DIFFERENCE FROM T+M	SURCHARGE? YES	NO
EDS	Lower rates for addt'l development for existing customer		X
Informatics	No fixed price		N/A
CSC/Infonet	No fixed price		N/A
Keane Assoc.	Depends on company and for what		X
GEISCO	Very little fixed price	X	
LTI	Start at T+M but much grey area	X	
American Mgmt. Sys.	Yes	X	
Datacare	Attempt		X
McAuto	Yes	X	
Arthur Andersen	Yes, rare fixed price except with government	X	
A.O. Smith	No, fixed price is based on competition		X
DASD	Yes, majority of work is T+M, easier to treat the same	X	
Spiradellis	Yes, cost structures are the same except for contingencies	X	
Monchik-Weber	Yes, only have 1 set of rates	X	
CDC	Yes	X	
EDS/Fed. Sys.	Yes, costs don't change		

INPUT

ORDER/INVOICE/FULFILLMENT

ORIGINATOR (SIGNATURE) _____ PREPARED BY: TCR DATE: 5/6/87

ACTIVITY

- [X] NEW ORDER
- [ ] CONTINUATION
- [ ] CHANGE
- [ ] CANCEL
- [ ] SPECIAL:

- [ ] FULFILLMENT ONLY
- [X] SINGLE INVOICING
- [ ] MULTI-INVOICING: NO. INVOICES _____
- [ ] PENDING:

COMMISSION TO:	SOLD BY:
_____ %	_____ %
_____ %	_____ %
_____ %	_____ %
_____ %	_____ %

APPROVED _____ INITIAL _____ DATE

PRODUCT

- [ ] SUBSCRIPTION
- [X] CUSTOM
- [ ] MULTICLIENT
- [ ] REPORTS
- [ ] COPIES
- [ ] CONSULT./PRESENT.
- [ ] TAPES/MATERIALS
- [ ] REIMBURSED COSTS

US / UK	PROJ. I.D./YEAR	TITLE OR DESCRIPTION	AMOUNT
US	YPSG	1985 Professional Services Survey	$11,000

CLIENT AUTH.

P.O. # _____ INPUT CONTRACT [ ] LETTER [ ] VERBAL [ ]

ATTACH ALL AUTHORIZING DOCUMENTS TO WHITE (CONTRACT) COPY.

ORIGINATOR / INVOICE

SHIP TO:*
NAME Robert Nolan
TITLE Director
COMPANY Martin Marietta Data Sys
ADDRESS 6305 Ivy Lane - 3rd Flr
Greenbelt MD 20770
PHONE (301) 982-6550

INVOICE TO: (IF DIFFERENT)
NAME Ross Macale
TITLE General Counsel
COMPANY Martin Marietta Data Systems
ADDRESS 6801 Rockledge Dr
Bethesda MD 20034
PHONE (301) 897-6789

* [ ] Check here if more than one shipping address and attach names and addresses to green (fulfillment) copy.

* [ ] Check here for address change to mail list.

INVOICE TO READ: (FOR OTHER THAN STANDARD WORDING)

SPECIAL INSTRUCTIONS FOR HANDLING, BILLING, STAGGERED OR DELAYED PAYMENTS, ETC.

O.I.F. ONLY

INV. COMP.	BY:	DATE:	CLIENT #:	ORDER #:	INV. #:	MULTI-INVOICING _____ OF _____

ORIGINATOR/SHIPPING FULFILLMENT

ITEM DESCRIPTION OR TITLE	NO.	BY	DATE	ITEM DESCRIPTION OR TITLE	NO.	BY	DATE

FULFILLMENT TO BE COMPLETED IN: [ ] PALO ALTO [ ] LONDON [ ] OTHER _____

• WHITE - CONTRACT • GREEN - FULFILLMENT • YELLOW - INVOICE • PINK - ORIGINATOR

R 1/87

YPS 9

MARTIN MARIETTA
5/13/86

Phase	#	@ $1,200 ESMD	TOF	LT Gr	LT Net
1	4,000	3.5	2.8	2	0.7
2	3,500	2.9	1.9	3	1.0
3	~~4,500~~ 3,500	2.8	2.8	0	0
Total	11,000	9.2 ~~4.8~~	7.5		1.7

7.5 x $300/DAY = $2250 FOR TOF

TYPING BILLED AS A PART OF EXPENSES

1985 QUARTERLY SCHEDULING PLAN (Q2)

PROJECT: YPSG

DATE: 5/6/85

PROJECT LEADER: TOFlaherty

ACTIVITY / PROJECT	TOP NAME	LT MAN DAYS	EFFI-CIENCY	ESMD	CORP WEEK END	APRIL 14 4/5	15 4/12	16 4/19	17 4/26	MAY 18 5/3	19 5/10	20 5/17	21 5/24	JUNE[1] 22(4) 5/31	23 6/7	24 6/14	25 6/21	26 6/28
PROJECT AUTHORIZATION/ SPECIFICATION																		
0 DESIGN/OC	28	0.7		3.5							3.5							
0 APPROVAL/ REVIEW MEETING	1.9	1.0		2.9								2.9						
INTERVIEWS ON SITE ( ) NO.	28			2.8									2.8					
INTERVIEWS PHONE ( ) NO.																		
DATATAB AND ANALYSIS																		
WRITING																		
ABSTRACT																		
OC																		
REPORT PROD. AND SHIPPING																		
PRESENTATION																		
TOTALS	7.5	1.7		9.2														

R3

INPUT

PROJECT WORK STATEMENT

TITLE 1985 Professional Services Survey

CLIENT Martin Marietta Data Systems

CONTRACT: ATTACHED ____ TO FOLLOW X LETTER ____ VERBAL X

PROJECT LEADER TO Flaherty CODE YPS9

DATE STARTED 5/3/85 PLANNED COMPLETION DATE 5/24/85

LEVEL OF EFFORT(Professional Man Days) 9.0

TOTAL CONTRACT VALUE: $ 11,000

REVENUE DISTRIBUTION (% or $) INPUT US ✓ INPUT LTD ____

REIMBURSABLE EXPENSES: NO ____

YES ✓

EXP. BUDGET reasonable TO COVER: TRAV: ✓
TEL: ✓
RPT. PREP.: ✓
OTHER: ____

BILLING SCHEDULE DESCRIPTION Phased billing

PROJECT DESCRIPTION

Phase 1 $4,000

2 3,500

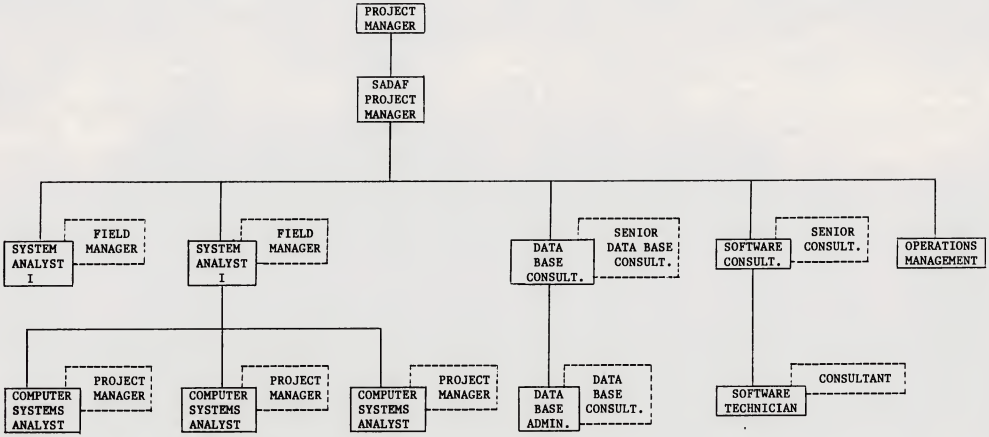
3 3,500

11,000

INDICATE TYPE OF CUSTOM WORK: REPORT ✓ PRESENTATION ____

THANK YOU PACKAGE: YES ✓ NO ____

SADAF



SYS. ANALYST II (FSD)
APPLICATION PROGRAMMER I (CSD)
APPLICATIONS PROGRAMMER II (CUSTOMIZER)

10. Could you provide me with your current (1983) rates per hour for the following categories? We have defined each title as including specific years of experience; if you do not use exactly the same definition, please provide the rate for the closest title and tell me what your definition is.

Title	Years Experience *	Equated Title / ~~Title~~ Variance	1983 Rate ($ per hour)
Account/Field Manager [Report to]	9 - 12	Sys An I / Project Mgr	
Project Leader	7 - 10	~~Sys An III~~ Comp Sys An	
Principal Consultant (in a specialized area)	10 - 15	DB Con	
Senior Consultant (in a specialized area)	9 - 12	DB Admin / SW Con	
Consultant (in a specialized area)	8 - 10	SW Technician / Sys An II	
~~Principal System Designer~~	~~7 - 10~~	Appl Pg II	
Senior Systems Analyst	5 - 7	Appl Pg I	
Systems Analyst	2 - 5	X	
~~Junior Systems Analyst~~	~~0 - 2~~		
Senior Programmer	5 - 7	X	
Programmer	2 - 5	X	
~~Junior Programmer~~	~~0 - 2~~		

* Not including education.

ATTACHMENT C

PROFESSIONAL CLASSIFICATIONS

Field Manager-Senior level MMDS manager who monitors performance against the scope of work and contract schedules and plans. The MMDS project manager reports directly to this individual. Field managers provide the principal interface with the customer on contract performance and staffing. (~~5~~-12 years experience)

Project Manager-The MMDS project leader who plans, monitors and directs the MMDS efforts under a contract. Responsible for all on-site efforts, as well as customizing and off-site efforts performed by MMDS. (7-10 years experience)

Principal Consultant-Top level consultant within a function (software, applications, operations, communications, etc.), who is capable of advising senior management within the technical or functional organizations. (10-15 years experience)

Senior Data Base Consultant-Top level data base administrator who is capable of structuring, leading and advising on the data base function within an organization. (9-12 years experience)

Data Base Consultant-Consultant who is a specialist in data base design concepts. The individual is knowledgeable of and can advise on the specific systems being designed or delivered to customers. (8-10 years experience)

Senior Consultant-Senior level individual who advises on systems functions and management utilization of systems. Primarily addresses how systems affect business disciplines and how procedures and organizations need to change to best take advantage of the systems capabilities. (9-15 years experience)

Consultant-Individual who works directly with line and data processing organizations to develop methods and procedures for systems installation and implementation. (8-10 years experience)

Functional System Designer-Individual who develops or revises the functional design of the system with the end user. A Functional System Design document is the end product of this task. (~~5~~-7 years experience)

Computer System Designer-Individual who translates the functional design into the computer system design. Where a current CSD exists, it is based on the functional differences requested by the customer. A Computer System Design document is the end product of this task. (~~5~~-7 years experience)

Senior Customizer-Senior level individual who has extensive technical knowledge of the standard application system to be modified. (5-7 years experience)

Customizer-The technical specialist who modifies the current system to meet the modified CSD. (2-5 years experience)

Test and Delivery-Individual who is responsible for installing and testing systems on customer computers. Systems are demonstrated through test procedures developed for each element of the product. (5-7 years experience)

Documentation Support-Technical writers who modify and prepare updated versions of systems documentation. (2-5 years experience)

Data Preparation-Individual who develops records or modifies routine data. (1-3 years experience)

Clerical/Typing/Word Processing-Individuals who are associated with document handling, typing, or capturing data on word processing equipment.

DELIVERABLES AND TIMING

- Specify exactly when and what is to be delivered.

REPORTING

- The contract states a bi-weekly review is to be performed.
- This must be re-emphasized in this exhibit.

PAYMENT

- The number of days or other payment obligation must be specified.
- There will normally be two week's delay between submission of an approved invoice and payment.
- No payment will be made unless the work is completed according to the contract and approved by the Project Manager.
- An incentive for on-time completion is recommended.
- The explicit expenses to be considered reimbursable, together with applicable limits, must be specified.

AUTHORIZATION

- All consultant tasks must be authorized by the Vice President of Operations.
- Consultant payment schedules should be according to completion of specific tasks rather than by number of days spent.

TITLE TRANSLATION

INTERVIEW TITLE	INTERNAL TITLES-PER ATTACHMENT "C" "PROFESSIONAL CLASSIFICATIONS"	SADAF TITLE(S) - TO BE USED IN REPORT
Superior to Account/ Field Manager	Director	Project Manager, SADAF Project Manger
Account/Field Manager	Field Manager	Systems Analyst I
Project Leader	Project Manager	Computer Systems Analyst
Principal Consultant	Principal Consultant	Data Base Consultant
Senior Consultant	Senior Data Base Consultant, Senior Consultant	Data Base Administrator, Software Consultant
Consultant	Consultant	Software Technician, Systems Analyst II
Systems Designer	Computer Systems Designer	Applications Programmer I
Senior Systems Analyst	Senior Consultant	Applications Programmer II

TITLE TRANSLATION

INTERVIEW TITLE	INTERNAL TITLES-PER ATTACHMENT "C" "PROFESSIONAL CLASSIFICATIONS"	SADAF TITLE(S) - TO BE USED IN REPORT
Superior to Account/ Field Manager	Director	Project Manager, SADAF Project Manger
Account/Field Manager	Field Manager	Systems Analyst I
Project Leader	Project Manager	Computer Systems Analyst
Principal Consultant	Principal Consultant	Data Base Consultant
Senior Consultant	Senior Data Base Consultant, Senior Consultant	Data Base Administrator, Software Consultant
Consultant	Consultant	Software Technician, Systems Analyst II
Systems Designer	Computer Systems Designer	Applications Programmer I
Senior Systems Analyst	Senior Consultant	Applications Programmer II

CATALOG NO. NPS9[ ][ ]

PROFESSIONAL SERVICES PRICING PRACTICES: 1985

INPUT is a research and consulting firm in Saddle Brook, NJ. We are conducting a study on professional service firms' pricing practices. In return for your taking part in our study, we will send you a summary of both our new and old reports at no charge.

1. Is your professional service business nationwide or is most of your work conducted in particular geographic areas?

   ( ) Nationwide

   ( ) Particular areas - Which ones?

   _____

   _____

   _____

   _____

2. Is each of the following customer or product areas a primary or secondary priority for your professional service activities?

	PRIMARY	SECONDARY
Commercial Accounts	_____	_____
Government Accounts	_____	_____
Federal ADP	_____	_____
Federal Embedded Computer (Weapons) Systems	_____	_____
State and Local	_____	_____
Manufacturing Applications*	_____*	_____*
Banking and Finance Applications	_____	_____
Health Care Applications	_____	_____
Other (describe)	_____	_____

* If primary or secondary manufacturing applications not checked, terminate interview.

3. If the average billing rates for your firm's management and technical staff equalled 100 in 1980, how would you see this index changing for your firm in each year up to 1985? Did you change your rates each year?

YEAR	INDEX	RATES CHANGES (CHECK)
1980	100	_____
1981	_____	_____
1982	_____	_____
1983	_____	_____
1984	_____	_____
1985	_____	_____

4. Could you provide me with your current (1985) rates per hour for the following categories? We have defined each title as including specific years of experience; if you do not use exactly the same definition, please provide the rate for the closest title and tell me what your definition is. What were these titles' rates in 1980 and 1983 (if dollars not available, give % of current rate).

TITLE	YEARS*	TITLE VARIANCE	1985 RATE ($ PER HOUR)	1980 RATE	1983 RATE
Account/ Field Manager	10-5				
Person whom Account/Field Manager Reports to (give typical title	15+				
Project Leader	7-10				
Principal Consultant (in a technical area)	10-15				
Senior Consultant (in a technical area)	9-10				

TITLE	YEARS*	TITLE VARIANCE	1985 RATE ($ PER HOUR)	1980 RATE	1983 RATE
Consultant (in a technical area)	8-10				
System Designer	7-10				
Senior Systems Analyst	5-7				
Systems Analyst	2-5				
Senior Programmer	5-7				
Programmer	2-5				

*Not including education.

5. Do you have formal variations (either higher or lower) from your standard rates related to:

	YES	NO
• Application Type (e.g., manufacturing vs general commercial).	_____	_____
• Geographic Area	_____	_____
• Special Expertise	_____	_____
• Other (describe) _____	_____	_____

FOR ALL AREAS ANSWERED "YES," ASK:

- Why?
- Give some examples.
- How large is the variance?

5b. DESCRIPTION OF RATE VARIATION

AREA	REASON	EXAMPLES	SIZE OF VARIANCE
Application Type (e.g., manufacturing vs.general commercial	_____	_____	_____
Geographic Area	_____	_____	_____
Special Expertise	_____	_____	_____
Other Describe	_____		
	_____		
	_____		

6. Do you ever give discounts from your standard rates?

( ) YES ( ) NO

IF YES:

- Under what conditions? _____

  _____

  _____

- How is this accomplished (e.g., reducing hourly rates, reducing billed hours, changing job categories, cost plus fixed fee)? _____

  _____

  _____

  _____

- About how often does this occur? _____

  _____

  _____

- About what percentage reduction from your standard rates is your typical discount? (May be one number or a range.) _____

  _____

  _____

7. When producing a fixed price proposal, do you use the same rate structure as used on T&M projects for project personnel?

( ) YES ( ) NO

IF NO, describe differences: _____

_____

_____

7b. Is a "surcharge" or "contingency factor" added to fixed price proposals over and above the result produced by your billing rate calculations (includes measuring number of hours)?

( ) YES ( ) NO

IF YES, how much, on the average? _____

7c. Sometimes you may perform task-oriented engagements, even though they are billed on a T&M basis. Do you use the same billing rate as for straight T&M work?

( ) YES ( ) NO

Why? _____

_____

_____

If NO, discuss differences: _____

_____

_____

8. Do you furnish a schedule of professional service rates to prospective clients?

( ) YES ( ) NO

IF YES: Would you send INPUT a copy?

( ) YES ( ) NO

ATTACHMENT

PROFESSIONAL CLASSIFICATIONS

Account or Field Manager - Senior level manager who monitors performance against the scope of work, and contract schedules and plans. The project leader reports directly to this individual. Field managers provide the principal interface with the customer on contract performance and staffing. (10-15 years experience)

Project Leader - Plans, monitors and directs the efforts under a contract. Responsible for all on-site efforts, as well as customizing and off-site efforts. (7-10 years experience)

Principal Consultant - Top level consultant within a function (software, applications, operations, data base, communications, etc.) who is capable of advising senior management within the technical or functional organizations. (20-15 years experience)

Senior Consultant - Senior level individual who advises on specialized systems functions. (9-12 years experience)

Consultant - Individual who works directly with line and data processing organizations and uses specialized knowledge to develop methods and procedures for systems installation and implementation. (8-10 years experience)

System Designer - Individual who translates the functional design into the computer system design. (7-10 years experience)

Attachment A

To: Thomas O'Flaherty
Consulting Agreement

Project: Martin Marietta Professional Services Update (YPS9)

Deliverables: Data, report & meeting per attached proposal dated 4/29 and letter dated 5/6.

Payment:

Phase	Amount
1	$840
2	$570
3	$840
Total	$2,250

Travel and Transportation to be billed separately (for pass through to client)

Clerical work to be done by INPUT staff and billed to client per regular practice.

Interviews: To be conducted by Laura Tutino per attached memo.

Agreed to:

Thomas O'Flaherty

Donald Fostle

TO: Laura Tutino

FROM: T. O'Flaherty

This will confirm our agreement that you will perform 10 interviews for YPS9 and be able to charge 5 days for this work, regardless of actual time taken.

My targets are 3 interviews this week and the remaining 7 by the end of next week, i.e., 5/17.

cc: D. Fostle

INTERVIEW TARGETS

Previously interviewed:

EDS
GEISCO
LTI
McAuto
Arthur Andersen
CDC

New Targets:

Coopers & Lybrand
Peat, Marwick
Arthur Young
Price Waterhouse
Deloitte Haskins & Sells
Booz Allen
Boeing Computer Services

TO: Laura Tutino

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Agreed to:

Thomas O'Flaherty

Donald Fostle

INPUT

1943 LANDINGS DRIVE, MOUNTAIN VIEW, CA 94043 (415) 960-3990

April 29, 1985

Mr. Ross Macaulay
General Counsel
MARTIN MARIETTA DATA SYSTEMS (MMDS)
6801 Rockledge Drive
Bethesda, MD 20034

Dear Mr. Macaulay:

Please accept this letter as a temporary contractual vehicle so INPUT can quickly begin the project we discussed on the telephone.

INPUT will prepare a detailed proposal for your approval. In the meantime, INPUT agrees to initiate a research project that will update the 1983 study on professional services billing rates. This update will also focus specifically on the 1978-82 time frame, companies with contracts in the middle east and companies performing complex systems work similar to that performed by MMDS for SADAF.

The work will be completed in 3 phases allowing MMDS to terminate the contract at the end of each phase. The phases are:

1. Define the questionnaire, survey the top three candidates, tabulate the responses and verbally present the results to MMDS.

2. Survey the next 7 candidates, tabulate the responses, analyze the data and verbally present the results to MMDS.

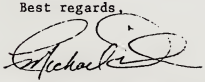
3. Prepare a written report of the findings of the study and spend two days with MMDS supporting the presentation of the data and other related tasks.

The fees, cummulatively, will not exceed the following; Phase 1 - $4,000, Phase 2 - $7,500 and Phase 3 - $11,000. INPUT will provide, in the formal proposal, a fixed price for the fees. The above fees are offered so work can begin immediately upon your concurrence below.

INPUT will complete Phase 1 within 2 weeks of your authorization and each subsequent phase will require 1 more week each.

Enclosed is the data I promised on the professional services industry growth.

Best regards,



C. Michael Dishman
Director, Consulting Services

CMD:jp

Enclosures

AUTHORIZED BY:
Martin Marietta Data Systems (MMDS)

Ross Macaulay
General Counsel

Date

ACCEPTED BY:
Input

James G. Grugan
Vice President

Date

U.S. COMPUTER SERVICES INDUSTRY PERFORMANCE SUMMARY

PROFESSIONAL SERVICES SEGMENT 1978-1982

	1978	1979	1980	1981	1982
Number of Companies in this sector	805	909	978	1,284	1,348
U.S. Revenue ($ million)	2,130	2,726	3,715	4,570	5,329
Growth Rate	25%	28%	36%	23%	17%

1. The growth in the 1979-1980 period includes INPUT estimates of the large CPA firms revenue for Professional Services from Information Services previously not captured.

2. The total companies tracked are those with annual revenues in excess of $250,000.

INPUT

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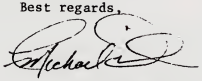

C. Michael Dishman
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Enclosures

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MMDS - Rolf (Ralph?) Macaulay, Gen. Counsel reports to Rich Walters, Pres.

- Contracted with SADAF, (Joint Venture of Shell and Saudi firm) SADAF is Saudi Petrochemical Co.
- Contract to provide complex Manufacturing system. They tried to "modify" their Mfg. Appl. System but found it necessary to start from scratch.
  - Very difficult job but they completed it and feel they did a first class job.
  - Used their very best people - admittedly most expensive. - but needed for this complex system.

* Issue is their rates for the period.

- allowed to use "prevailing rates"
- allowed to escalate 10% per year but not to exceed "prevailing rates" - prevailing meaning current competitive rates

- need to know competitive rates for 1978-82 period.
  - comparison should be big 8, companies with Saudi contracts, companies with very complex systems.

CSC Systems Div is one; jobs done for Saudi Ministry of Int. (Can get).

Update of Slaterry 6-53 Study

- SADAF contending the P.S. industry is declining therefore the rates should be lower. MMDS needs to know the P.S. industry growth for 1978-82 period

'83 Study was $12,500 This one should be $8-10K

343-6586
438-8332

13. Are you aware of any competitors to the CIS system? Who?

(PROBE) _____

_____

_____

14. Do you believe Anacomp's marketability would be enhanced if they teamed with a very large bank? Please elaborate?

_____

_____

_____

How about if CIS were acquired outright? _____

_____

_____

15. We are interested in your perception of the competitive environment. Please rate the following vendors:
W - Weak, G - Good, E - Excellent

	Product	Reputation	Future	Familiarity
Hogan Systems				
Anacomp				
UCCEL				
Mellon				
Cullinet				
M & I				
M Corp				
Other				

_____

16. Are there any additional comments you would like to add?

_____

_____

INPUT

ORDER/INVOICE/FULFILLMENT

ORIGINATOR (SIGNATURE) _____ DATE 2/9/83

ACTIVITY

- ☒ NEW ORDER
- ☐ CONTINUATION
- ☐ CHANGE
- ☐ CANCEL
- ☐ SPECIAL:

- ☐ FULFILLMENT ONLY
- ☐ SINGLE INVOICING
- ☒ MULTI-INVOICING:
  NO. INVOICES _____
- ☐ PENDING:

COMMISSION TO:		SOLD BY:	
	%	EIM	50 %
N/A	%	TAC	50 %
	%		%
	%		%

APPROVED _____ INITIAL 2/11/83 DATE

PRODUCT

- ☐ SUBSCRIPTION
- ☒ CUSTOM
- ☐ MULTICLIENT
- ☐ REPORTS
- ☐ COPIES
- ☐ CONSULT/PRESENT.
- ☐ TAPES/MATERIALS
- ☐ REIMBURSED COSTS

US / UK	PROJ. I.D./YEAR	TITLE OR DESCRIPTION	AMOUNT
100	YPSP	Professional Service pricing practices	12,500

CLIENT AUTH.

P.O. # _____ INPUT CONTRACT ☒ LETTER ☐ VERBAL ☐

ATTACH ALL AUTHORIZING DOCUMENTS TO WHITE (CONTRACT) COPY.

ORIGINATOR

INVOICE

SHIP TO:*
NAME Mr Dan McCullough
TITLE _____
COMPANY Martin Marietta Data Systems
ADDRESS 6303 Ivy Lane
~~Bethesda~~ Greenbelt MD 20770
PHONE (301) 982-6552

INVOICE TO: (IF DIFFERENT)
NAME _____
TITLE _____
COMPANY _____
ADDRESS _____
PHONE ( )

* ☐ Check here if more than one shipping address and attach names and addresses to green (fulfillment) copy.

* ☐ Check here for address change to mail list.

INVOICE TO READ: (FOR OTHER THAN STANDARD WORDING)

SPECIAL INSTRUCTIONS FOR HANDLING, BILLING, STAGGERED OR DELAYED PAYMENTS, ETC.
Bill as noted

O.I.F. ONLY

INVOICE COMP.:	BY:	DATE:	CLIENT NUMBER:	O/I/F NUMBER	MULTI-INVOICING ____ OF ____

ORIGINATOR/SHIPPING FULFILLMENT

ITEM DESCRIPTION OR TITLE	NO.	BY	DATE	ITEM DESCRIPTION OR TITLE	NO.	BY	DATE

• WHITE - CONTRACT • GREEN - FULFILLMENT • YELLOW - INVOICE • PINK - ORIGINATOR
• GOLDENROD - REGIONAL SALES MANAGER

8/80

INPUT

PARK 80 PLAZA WEST-1, SADDLE BROOK, NEW JERSEY 07662 (201) 368-9471

January 20, 1983

Mr. Don McCullough
Martin-Marietta Data Systems
6801 Rockledge Drive
Bethesda, Maryland 20034

Dear Mr. McCullough:

This letter is a response to the telephone conversations that Mr. Tom O'Flaherty and I had with you last week concerning INPUT performing a custom study for Martin-Marietta Data Systems on professional service firms' pricing practices.

We are appreciative that you have looked to INPUT for this study and we believe that your confidence is well placed. In the last year, we have conducted a wide range of studies identifying business practices in the information service industry.

The remainder of this letter is divided into the following sections:

- o INPUT's Understanding
- o Scope
- o Methodology
- o Schedule and fee

INPUT's Understanding

Martin-Marietta Data Systems (MMDS) Professional Services Group wishes to obtain up-to-date and detailed information on pricing and associated business practices of its competitors.

MMDS requires this information on competitors who are factors in both the government market as well as the general commercial market (excluding single industry specialist firms such as SEI). MMDS is particularly interested in competitors who do considerable work on a project basis (e.g., T&M work with a project management component and fixed price jobs).

Scope

In the course of the study, the following issues will be addressed:

- o What are the 1982 & 1983 hourly rates, by major position categories?
  - Why are rates changing?

Follow up
Impact proc

- What are the expected trends?

o Are the same rates used for T&M jobs as for fixed price jobs?

o What are levels of effective discounts?

  - Under what conditions are they given?

  - How are they given (changing billed hours, changing assigned job categories, etc.)?

o How significant are variations from standard rates due to such factors as:

  - Type of industry

  - Region

  - Technical focus

  - Special expertise

o How do professional service firms see rates being affected by,

  - Advances in productivity techniques (either public or proprietary)

  - Turnover rates

  - Personnel shortages

Methodology

o INPUT will use its best efforts to interview 18 professional service firms, with equal priority given to those in the government and commercial sectors

  - INPUT will develop a questionnaire and review it with MMDS

  - The list of firms to be interviewed will be agreed to jointly by INPUT and MMDS

o Respondents will be offered a summary of the study as a incentive for taking part in the study.

- The data required by MMDS is sensitive information. This will have the following effects on this project:
  - More firms than average may be unwilling to participate; this may necessitate adding more firms to the target list.
  - Some firms may only participate if interviews are held on site; since on site interviews will add to time and expense, such firms will only be interviewed if necessary for the study's success. If this is required and will involve additional expense, MMDS approval will be required.
  - Only a small number of people in some firms may be authorized to release this type of data; this will add to the elapsed time needed to gain interviews.

Schedule & Fee

The schedule is as follows:

- Week 1: Design and review questionnaire
- Week 2-4: Interviews
- Week 5: Analysis and preparation of report
- Week 6: Presentation of results to MMDS
- Week 8: Delivery of final written report

The professional fee for this study is $12,500. Out-of-pocket expenses will be billed at cost. Any additional professional fee or out-of-pocket expense required to conduct on site interviews will be approved by MMDS in advance. If in the course of the study, it becomes apparent that it is not possible to obtain the quality and/or quantity of data for a satisfactory report, INPUT will recommend termination and only bill for time and expense incurred.

INPUT looks forward to working with MMDS on this project. If you have any questions, about this proposal please do not hesitate to call Tom O'Flaherty or myself.

Sincerely,

Edward I. Metz

Edward I. Metz
Senior Vice President

AUTHORIZED BY MMDS

Ed Donald McCullough
NAME

Product Director, Prof. Svcs.
TITLE

February 8, 1983
DATE

ACCEPTED BY INPUT

Thomas
NAME

Principal Consultant
TITLE

Feb 8, 1983
DATE

INPUT

PARK 80 PLAZA WEST-1, SADDLE BROOK, NEW JERSEY 07662 (201) 368-9471

June 7, 1983

Mr. Don McCullough
Martin Marietta Data Systems
6301 Ivy Lane, Suite 300
Greenbelt, MD 20770

Dear Don:

Enclosed is our draft final report on "Professional Services Pricing Practices." As I indicated to you on the telephone, we have included data on ASK, but only pricing data, since they do not feel they are in the professional services business. In spite of repeated attempts, we have been unable to make contact with MSA/Arista or Comserv. If we are able to get additional data from either of these companies, we will include it as an addendum.

Let me know if you have any comments before we make this final. Please note that I will be out of the country with a professional delegation visiting China from June 20 to July 7.

I have enjoyed working on this project and if I or INPUT can be of further service do not hesitate to call.

Sincerely,

Tom

Thomas O'Flaherty
Principal Consultant

Enclosure
lcg

PROFESSIONAL SERVICES
PRICING PRACTICES

PREPARED FOR

MARTIN MARIETTA DATA SYSTEMS

JUNE 1983

INPUT

I. INTRODUCTION

- In March and April 1983 INPUT conducted a study for Martin Marietta Data Systems to identify the pricing practices in the professional services industry.

- Interviews were conducted by telephone; the names of companies to be contacted were developed jointly by INPUT and Martin Marietta. Martin Marietta was not identified as the client. Interviewees were offered a summary of the study as an incentive to take part. Martin Marietta will have an opportunity to review the summary prior to its dispatch.

  - A copy of the questionnaire used is in Appendix A. This questionnaire was reviewed with Martin Marietta prior to use.

  - The names of companies interviewed are in Exhibit 1.

    . Note: ASK Computer declined to answer most questions since it does not consider itself to be in the professional services market, but selling entire, standard systems; modifications are discouraged.

  - The titles of those interviewed are in Exhibit 2. Senior management was almost always interviewed because of the sensitive nature of the data as well as management level knowledge required.

EXHIBIT 1

FIRMS INTERVIEWED

EDS
INFORMATICS
CSC/INFONET
KEANE ASSOCIATES
GEISCO
LTI
AMERICAN MANAGEMENT SYSTEMS
DATACARE
MC AUTO
ARTHUR ANDERSEN
A.O. SMITH
DASD
SPIRADELLIS
MONCHIK-WEBER
CDC
EDS/FEDERAL SYSTEMS
ASK

EXHIBIT 2

INTERVIEWEE TITLES

SYSTEMS ENGINEERING MANAGER

VICE PRESIDENT OPERATIONS

MANAGER, PROFESSIONAL SERVICES

MANAGER FINANCE, SYSTEMS DEVELOPMENT AND CONSULTANTS

SENIOR VICE PRESIDENT

MANAGER OF GOVERNMENT PROGRAMS

DIRECTOR OF ADMINISTRATIVE SERVICES

MANAGER OF MARKET RESEARCH

PARTNER

DIRECTOR OF PLANNING

SENIOR VICE PRESIDENT OF DEVELOPMENT

CHIEF OPERATING OFFICER

STRATEGIC PLANNER/PROFESSIONAL SERVICES

GROUP VICE PRESIDENT

II. Respondent Data

- Respondent size and growth rates, based on available data, are shown in Exhibit 3.

- The respondent companies view themselves as being in multiple markets (Exhibit 4).

  - Originally, it was planned to segment companies by whether they were in the Federal market or not.

  - However, only one company saw itself as only in the Federal market, so that segmentation was not feasible.

- The respondents generally see themselves as having many competitors (Exhibit 5). These competitors are varied, including professional service firms, processing firms, accounting firms and, increasingly, hardware companies.

III. Pricing and Factors Affecting Pricing

- The average 1983 rate per hour ranges from $101 for an account manager to $39 for a junior programmer (Exhibit 6). The titles and definitions are those used by Martin Marietta; respondents noted where their definitions differed.

  - Exhibit 7 shows the data for each company.

EXHIBIT 3

RESPONDENT PROFILES: NON-CAPTIVE PROFESSIONAL SERVICES DATA

	1981 REVENUES ($ MILL)	PERCENTAGE GROWTH (1980 TO 1981)
EDS	$ 206	17%
INFORMATICS	34	10%
CSC/INFONET	389	15%
KEANE ASSOCIATES	12	1.3%
GEISCO	56	
LTI	See GEISCO	-
AMERICAN MANAGEMENT SYSTEMS	31	3%
DATACARE	*	
MC AUTO	20	16%
ARTHUR ANDERSEN	191	30%
A.O. SMITH	*	
DASD	22	12%
SPIRADELLIS	14	44%
MONCHIK WEBER	10	98%
CDC	80	14%
EDS/FEDERAL SYSTEMS	See EDS	
ASK	**	-

* NO DATA AVAILABLE
**NO PROFESSIONAL SERVICES REVENUES REPORTED

INPUT

EXHIBIT 4

PRIMARY AND SECONDARY PROFESSIONAL SERVICE AREAS

(P=Primary, S=Secondary)

VENDOR	COMM'L	GOVERNMENT FED. ADP	GOVERNMENT ECS	GOVERNMENT NON-FED.	MFG.	BANKING/ FINANCE	HEALTH	OTHER
EDS	P				P			P
Informatics	P	P		P	S	P	S	
CSC/Infonet	P				S	P	S	
~~Keane Assoc.~~	P				~~P~~		S	
GEISCO	P	S			P	P	S	
LTI	P			P	P	P	S	
American Mgmt. Sys.							P	
Datacare	P	P		P	P	P	P	
McAuto								
Arthur Andersen	P	S		S	P	P	P	
A.O. Smith					S	P		
~~DASD~~	P				~~P~~	P	P	
Spiradellis	P	S	S	S	S	P	P	
Monchik-Weber	S					P		
CDC	P	P	S	S	P	S	P	
EDS/Fed. Sys.		P		P				

INPUT

EXHIBIT 5

PRIMARY COMPETITION

VENDOR	COMPETITORS (* = FUTURE)
EDS	*Burroughs, *IBM, *Data General
Informatics	CSC, Planning Research
CSC/Infonet	Other RCS firms - Price; Consulting Cos. - Flexibility
Keane Associates	Computer manufacturers*
GEISCO	In-house, McAuto, Boeing, Tymshare, Rapidata, *IBM, *American Telephone
LTI	Big 8 accounting firms
American Mgmt Sys	Booz Allen, McKinzey, Arthur Andersen, Peat Marwick, *Arthur Young & Co.
Datacare	Technicon
McAuto	Arthur Andersen, Informatics, Boeing, In-house, *Big 8
Arthur Andersen	Big 8, AMS, CSC, EDS, Booz Allen, A.D. Little (a bit)
A.O. Smith	Applied Comms. Inc. (ACI), ANACOMP-Kransley, GEISCO (Bank Systems)
DASD	EDS, CSC, Computer Task Group
Spiradellis	Lambda, CGA, OSI
Monchik Weber	Consulting - Big 8; Devel. - in-house, body shops and independents, Production - (ADP) any D.P. production services
CDC	*Small education courseware cos. - Micro cos. A.D. Little - established market presence; IBM - reputation, products; Computervision strong products; McAuto, CSC
EDS/Fed. Sys.	CSC, Planning Research, SDC/Burroughs, CDSI, CACI

EXHIBIT 6

1983 RATES (AVERAGE)

TITLE	RATE
ACCOUNT MANAGER	$101
PROJECT LEADER	79
PRINCIPAL CONSULTANT	97
SENIOR CONSULTANT	91
CONSULTANT	76
PRINCIPAL DESIGNER	69
SR. SYSTEMS ANALYST	60
SYSTEMS ANALYST	50
JR. SYSTEMS ANALYST	45
SR. PROGRAMMER	47
PROGRAMMER	41
JR. PROGRAMMER	39

EXHIBIT 7

1983 $'s RATES (* = Variance from Definition - See Exhibit 8)

VENDOR	ACCT MGR	PROJ LEAD	PRIN CONS	SR CONS	CONS	PRIN DES	SR SA	SA	JR SA	SR PROG	PROG	JR PROG
EDS	* 55	* 55	* 55	* 55	* 55	* 55	*55	*55	*55	*55	*55	*55
Informatics	60	80	55	50	50	40	37	37	35	40	30	30
CSC/Infonet	N/A	63	70	71.50	63	54	47	39	34	47	39	34
Keane Assoc.	N/A	N/A	62.50	37.50	25	25	25	25	18.75	18.75	18.75	18.75
GEISCO	* 90	* 90	125	105	105	* 80	*80	70	60	70	60	52.50
LTI	All Proprietary											
American Mgmt. Sys.	*117.50	*117.50	117.50	65	55	85	52	42	35	47	35	N/A
Datacare	80	70	90	90	N/A	80	80	70	55	80	70	55
McAuto	See Exhibit 8											
Arthur Andersen	160	125	175	160	125	80	*52			*		*
A.O. Smith		* 90	*110	*110		90	75		65			
DASD		42	65	50	45	42		35	N/A	30	N/A	N/A
Spiradellis	N/A	60	90	80	65	72.50	55	55		45	35	N/A
Monchik-Weber		*137	137	100	100	*80	80	65		50	40	
CDC			175	150	131	100	76	65	55	45	41	37
EDS/Fed. Sys.												
ASK	* 65	*65	* 65	* 65	* 65	* 65	*65	*65	*65	*65	*65	*65

- Note the larger variation between companies.

  . Generally, the ratio between the most and least expensive company was largest in the more senior positions.

  . This ratio was not affected by whether a company used the same title definition as Martin Marietta.

- Variations between respondent title definitions and those of Martin Marietta are shown in Exhibit 8.

• Exhibit 9 shows the expectd rate increase, from 1981 to 1984, using 1980 as the base year.

- Note how the percent change closely mirrors the inflation rate.

- Exhibit 10 provides this same data for each respondent.

  . GEISCO sees the greatest increase from 1980 to 1984, and Datacare, EDS and Informatics the least.

  . AMS sees the biggest change between 1983 and 1984 and Datacare the least.

EXHIBIT 8

VARIANCES IN RESPONDENT TITLE STRUCTURE

EDS

- Same rate for all staff levels.
- $90 for new customers.

GEISCO

- Account/Field Manager and Project Leader both included in "Project Manager".
- Principal System Designer and Senior System Analyst both included in "Senior Applications Specialist".

AMS

- Account/Field Manager and Project Leader both included in "Principal" or "Vice President".

MC AUTO

- Rates proprietary.
- Following titles are same as Martin Marietta.
  - Project Leader (5-8 years experience)
  - Consultant Series
  - Programmer

- Following titles vary
  - Sr. Systems Analyst and Sr. Programmer are combined in "Sr. Programmer Analyst".
  - There are no Junior Systems Analysts.
  - Junior Programmer is called "Associate Programmer".
- In addition there is the title "Executive Consultant", with 15-20 years experience.

ARTHUR ANDERSEN

- In the top five Martin Marietta titles there is a general consistency of titles, but with broader rate ranges:

MARTIN MARIETTA	ARTHUR ANDERSEN	$ RANGE
Account/Field Mgr.	Young Partner/Top Mgr.	$140-180
Project Leader	Younger Manager	$110-140
Principal Consultant	Young Partner or Top Manager	$150-200
Senior Consultant	Young Partner or Top Manager	$140-180
Consultant	Younger Manager	$110-140

- "Partners" (off this scale) have a range of $180-275.
- Senior technical staff have a range of $65-95.
- Other technical staff have a range of $45-60.

A.O. SMITH

- Project Leader equated to "Project Manager".
- Principal and Senior Consultants are one title.

MONCHIK-WEBER

- Principal System Designer is equated to a Principal Consultant with a range of $125-150.
- A Principal System Designer is equated to a Senior Systems Analyst.

ASK

- Same rate for all staff levels.

EXHIBIT 9

BILLING RATE INCREASES
(AVERAGE)

YEAR	INDEX	PERCENT CHANGE
1980	100	-
1981	109	9%
1982	118	8%
1983	123	4%
1984	130	6%

EXHIBIT 10

BILLING RATE INCREASES (1980 = 100)

VENDOR	1981	1982	1983	1984
EDS	100	110	115	120
Informatics	110	115	115	120
CSC/Infonet	110	120	120	130
Keane Assoc.				
GEISCO	116	130	142	153
LTI				
American Mgmt. Sys.	100	110	110	125
Datacare		20%		Static
McAuto				
Arthur Andersen	110	123	133	136
A.O. Smith				
DASD	110	118	124	
Spiradellis	110	113	121	127
Monchik-Weber	108	122	122	128
CDC	112	119	125	128
EDS/Fed. Sys.	112	120	126	133

- Competition and costs were seen as the most important factors affecting pricing and inflation and turnover the least important (Exhibit 11).

  - Note, however, that cost/inflation and personnel shortage/turnover are each closely related.

  - Exhibit 12 shows the individual ratings for each respondent.

V. Pricing Practices

- Exhibit 13 shows under what conditions respondents make variations from their standard rates.

  - The amount of competition and the related factors of expertise and customer type are the most common.

- Discounts are common (Exhibit 14), typically for large jobs or in competitive situations.

- Billing practices are essentially the same for task-oriented as for time and materials work (Exhibit 15).

- Where companies use the same rate structure for fixed price work, they generally add a surcharge (Exhibit 16).

EXHIBIT 11

IMPORTANCE OF FACTORS ON BILLING RATES
(SUMMARY)

FACTOR	IMPORTANCE*
COMPETITION	3.7
COSTS	3.6
TOOLS	3.4
PERSONNEL SHORTAGE	3.2
CUSTOMERS' FINANCES	3.0
INFLATION	2.6
TURNOVER	2.3

* 1 = LOW, 5 = HIGH

EXHIBIT 12

IMPORTANCE OF FACTORS ON BILLING RATES

VENDOR	INFLATION	TURNOVER	COSTS	CUSTOMERS' FINANCES	PERSONNEL SHORTAGES	COMPE-TITION	TOOLS
EDS	4	2	3	1	1	1	1
Informatics	5	3	5	4	4	4	2
CSC/Infonet	1	1	1	1	4	5	3
Keane Assoc.	1	1	3	5	3	3	5
GEISCO	3	1	2	4	1	4	4
LTI							
American Mgmt. Sys.	3	4	4	2	3	5	4
Datacare		2	5	3	2	4	DK
McAuto	4	1	4	2	3	3	3
Arthur Andersen	2	2	3.5	3	4		1
A.O. Smith	1	1	5	5	5	5	5
DASD	3	5	4	3	4	2	
Spiradellis	2	3	3	4	5	4	5
Monchik Weber	4	2.5	4	3	4	4	3
CDC	3	1	4	2	2	4	5
EDS/Fed. Sys.	1	5					

INPUT

EXHIBIT 13

VARIATIONS FROM STANDARD RATES

VENDOR	CUST. TYPE	APPL. TYPE	AMOUNT OF COMPETITION	GEOGRAPHY	EXPERTISE	OTHER
EDS						
Informatics	X		X		X	
CSC/Infonet						X
Keane Assoc.					X	
GEISCO	X		X			
LTI			X	X		
American Mgmt.						
Datacare			X		X	
McAuto						
Arthur Andersen				X	X	
A.O. Smith	X		X		X	
DASD	X				X	
Spiradellis			X	X	X	
Monchik Weber						
CDC	X					
EDS/Fed. Sys.						

INPUT

EXHIBIT 14

DISCOUNTS

VENDOR	YES	NO	DETAILS
EDS		X	
Informatics	X		Rarely.
CSC/Infonet	X		Contracts over $100K.
Keane Assoc.	X		Multiple sales installations or long contracts.
GEISCO	X		On site work, long term, meet competition.
LTI			Proprietary.
American Mgmt. Systems	X		Government procurement regulations.
Datacare	X		Assessment of competition and geographic location of client.
McAuto	X		Competitive, size of contract, multi-year.
Arthur Andersen	X		Only if partner or division decide to propose to do work for less, or government contracts.
A.O. Smith		X	
DASD	X		Only on large jobs.
Spiradellis	X		Annual volume discounts, rebate based on turnover.
Monchik-Weber		X	
CDC		X	Four types of hourly volume discounts in all categories.
EDS/Fed. Sys.			Cost build ups - need to demonstrate profit won't exceed certain % of costs.

INPUT

EXHIBIT 15

BILLING PRACTICES FOR TASK-ORIENTED WORK

VENDOR	TASK-ORIENTED SAME AS T+M? YES	NO	REASONS
EDS	X		No distinction.
Informatics		X	Task order is higher and includes mgmt. responsibility.
CSC/Infonet	X		Company policy because of volume and % of federal government business.
Keane Assoc.		X	Would benefit customer if project similar to another.
GEISCO	X		Better estimates on module basis.
LTI	X		No tools to reduce time effort.
American Mgmt. Systems	X		Work fixed priced by deliverables.
Datacare	X		Have no reason not to.
McAuto	X		Cost build up rather than value or market pricing.
Arthur Andersen	X		Billing rates related to experience.
A.O. Smith	X		No task to hang dollar on - either FP or T+M.
DASD	X		Majority of work is T+M - easier to treat in same manner.
Spiradellis	X		Cost structures are the same except for contingency factors.
Monchik-Weber	X		Only have one set of rates.
CDC	X		
EDS/Fed. Sys.	X		Costs don't change - same cost basis.

EXHIBIT 16

FIXED PRICE PROPOSALS

VENDOR	FIXED PRICE USES SAME RATE STRUCTURE AS T+M	SURCHARGE YES	SURCHARGE NO
EDS	Lower rates for addt'l development for existing customer		X
Informatics	No fixed price		N/A
CSC/Infonet	No fixed price		N/A
Keane Assoc.	Depends on company and for what		X
GEISCO	Very little fixed price	X	
ETI	Start at T+M but much grey area	X	
American Mgmt. Sys.	Yes	X	
Datacare	Attempt		X
McAuto	Yes	X	
Arthur Andersen	Yes, rare fixed price except with government	X	
A.O. Smith	No, fixed price is based on competition		X
DASD	Yes, majority of work is T+M, easier to treat the same	X	
Spiradellis	Yes, cost structures are the same except for contingencies	X	
Monchik Weber	Yes, only have 1 set of rates	X	
CDC	Yes	X	
EDS/Fed. Sys.	Yes, costs don't change		

APPENDIX A:

QUESTIONNAIRE

PROFESSIONAL SERVICES PRICING PRACTICES

INPUT is a research and consulting firm in Saddle Brook, NJ. We are updating conducting a study on professional service firms' pricing practices. In return for your taking part in our study, we will send you a summary of our report at no charge.

both our old & new

1. Is your professional service business nationwide or is most of your work conducted in particular geographic areas?

   ☐ Nationwide

   ☐ Particular areas - Which ones?

   _____

   _____

   _____

   _____

CATALOG NO. [ ]

2. Is each of the following customer or product areas a primary or secondary priority for your professional services activities?

	Primary	Secondary
Commercial Accounts	_____	_____
Government Accounts	_____	_____
Federal ADP	_____	_____
Federal Embedded Computer (Weapons) Systems	_____	_____
State and Local	_____	_____
Manufacturing Applications	_____	_____
Banking and Finance Applications	_____	_____
Health Care Applications	_____	_____
Other (describe)	_____	_____

focus ?? qualifier ??

3a. What professional service firms do you see as your primary competition now? What do you see as their strengths?

_____

_____

_____

_____

3b. What other firms do you think might be added to that list in two or three years?

_____

_____

_____

5a. When producing a fixed price proposal, do you use the same rate structure as used on T&M projects for project personnel?

☐ Yes ☐ No

If NO, describe differences: _____

_____

_____

5b. Where not doing fixed price work, do you use the same billing rate for straight T&M engagements as for task-oriented engagements (even if billed for on a T&M basis)?

☐ Yes ☐ No

Why? _____

_____

_____

If NO, discuss differences: _____

_____

_____

5c. Is a "surcharge" or "contingency factor" added to fixed price proposals over and above the result produced by your billing rate calculations (includes measuring number of hours)?

☐ Yes ☐ No

If YES, how much, on the average? _____

6. How important is each of the following factors in affecting changes in your billing rates (1 = low, 5 = high)? Why?

	Importance	Reason
General Inflation Rate	____	____
	____	____
Your Firm's Personnel Turnover	____	____
Your Cost Structure	____	____
Your Customers' Economic Conditions	____	____
	____	____
Personnel Shortages	____	____
Your Competitors' Rates	____	____
	____	____
Proprietary Productivity Tools or Approaches	____	____

7. If the average billing rates for your firm's management and technical staff equalled 100 in 1980, how would you see this index changing for your firm in each year up to ~~1984~~ 1985? Why?

Year	Index	Reason
1980	100	____
	____	____
1981	____	____
	____	____
1982	____	____
	____	____
1983	____	____
	____	____
1984	____	____
	____	____
1985	____	____

8. Do you have formal variations (either higher or lower) from your standard rates related to:

	Yes	No
• Type of Customer (e.g., commercial vs. government)	_____	_____
• Application Type (e.g., manufacturing vs. general commercial)	_____	_____
• Competitive vs. Noncompetitive Situations	_____	_____
• Geographic Area	_____	_____
• Special Expertise	_____	_____
• Other (describe) _____	_____	_____

FOR ALL AREAS ANSWERED "YES," ASK:

- Why?
- Give some examples.
- How large is the variance?

COMPLETE ANSWERS ON ATTACHED SHEET.

III. DESCRIPTION OF RATE VARIATION

Area	Reason	Examples	Size of Variance
Type of Customer (e.g., commercial vs. government)			
Application Type (e.g., manufacturing vs. general commercial)			
Competitive vs. Noncompetitive Situations			
Geographic Area			
Special Expertise			
Other (describe)			

_____

_____

CATALOG NO. [illegible]

Do you ever give discounts from your standard rates?

☐ Yes ☐ No

IF YES:

- Under what conditions? _____

  _____

- How is this accomplished (e.g., reducing hourly rates, reducing billed hours, changing job categories, cost plus fixed fee)?

  _____

  _____

  _____

- About how often does this occur?

  _____

- About what percentage reduction from your standard rates is your typical discount? (May be one number or a range.)

  _____

10. Could you provide me with your current (1985) rates per hour for the following categories? We have defined each title as including specific years of experience; if you do not use exactly the same definition, please provide the rate for the closest title and tell me what your definition is.

What was the equivalent rate in 1980 for each title?

Title	Years Experience *	Title Variance	1985 Rate ($ per hour)
Account/Field Manager	~~5 - 12~~ 10 - 15		
Project Leader	7 - 10		
Principal Consultant (in a specialized area)	10 - 15		
Senior Consultant (in a specialized area)	9 - 12		
Consultant (in a specialized area)	8 - 10		
~~Principal~~ System Designer	7 - 10		
Senior Systems Analyst	5 - 7		
Systems Analyst	2 - 5		
~~Junior Systems Analyst~~	~~0 - 2~~		
Senior Programmer	5 - 7		
Programmer	2 - 5		
~~Junior Programmer~~	~~0 - 2~~		

* Not including education.

11. Do you furnish a schedule of professional service rates to prospective clients?

current

☐ Yes ☐ No

IF YES: Would you send INPUT a copy?

☐ Yes ☐ No

Y-PSP

INPUT

PARK 80 PLAZA WEST-1, SADDLE BROOK, NEW JERSEY 07662 (201) 368-9471

Rolf Macaulay, General Counsel
6801 Rockledge Dr.
Bethesda Md 20034
301- 897-6789
Home 301-378 8427

June 7, 1983

Mr. Don McCullough
Martin Marietta Data Systems
6301 Ivy Lane, Suite 300
Greenbelt, MD 20770

Dear Don:

Enclosed is our draft final report on "Professional Services Pricing Practices." As I indicated to you on the telephone, we have included data on ASK, but only pricing data, since they do not feel they are in the professional services business. In spite of repeated attempts, we have been unable to make contact with MSA/Arista or Comserv. If we are able to get additional data from either of these companies, we will include it as an addendum.

Let me know if you have any comments before we make this final. Please note that I will be out of the country with a professional delegation visiting China from June 20 to July 7.

I have enjoyed working on this project and if I or INPUT can be of further service do not hesitate to call.

Sincerely,

Tom

Thomas O'Flaherty
Principal Consultant

Enclosure
lcg

Sending to CAIS
Job description
Newspaper MMDS Restaurant pricing
Job titles
More info. on the Contract

PROFESSIONAL SERVICES
PRICING PRACTICES

PREPARED FOR

MARTIN MARIETTA DATA SYSTEMS

JUNE 1983

INPUT

I. INTRODUCTION

- In March and April 1983 INPUT conducted a study for Martin Marietta Data Systems to identify the pricing practices in the professional services industry.

- Interviews were conducted by telephone; the names of companies to be contacted were developed jointly by INPUT and Martin Marietta. Martin Marietta was not identified as the client. Interviewees were offered a summary of the study as an incentive to take part. Martin Marietta will have an opportunity to review the summary prior to its dispatch.

  - A copy of the questionnaire used is in Appendix A. This questionnaire was reviewed with Martin Marietta prior to use.

  - The names of companies interviewed are in Exhibit 1.

    . Note: ASK Computer declined to answer most questions since it does not consider itself to be in the professional services market, but sells entire, standard systems; modifications are discouraged.

  - The titles of those interviewed are in Exhibit 2. Senior management was almost always interviewed because of the sensitive nature of the data as well as management level knowledge required.

EXHIBIT 1

FIRMS INTERVIEWED

EDS
INFORMATICS
CSC/INFONET
KEANE ASSOCIATES
GEISCO
LTI
AMERICAN MANAGEMENT SYSTEMS
DATACARE
MC AUTO
ARTHUR ANDERSEN
A.O. SMITH
DASD
SPIRADELLIS
MONCHIK-WEBER
CDC
EDS/FEDERAL SYSTEMS
ASK

EXHIBIT 2

INTERVIEWEE TITLES

SYSTEMS ENGINEERING MANAGER

VICE PRESIDENT OPERATIONS

MANAGER, PROFESSIONAL SERVICES

MANAGER FINANCE, SYSTEMS DEVELOPMENT AND CONSULTANTS

SENIOR VICE PRESIDENT

MANAGER OF GOVERNMENT PROGRAMS

DIRECTOR OF ADMINISTRATIVE SERVICES

MANAGER OF MARKET RESEARCH

PARTNER

DIRECTOR OF PLANNING

SENIOR VICE PRESIDENT OF DEVELOPMENT

CHIEF OPERATING OFFICER

STRATEGIC PLANNER/PROFESSIONAL SERVICES

GROUP VICE PRESIDENT

II. Respondent Data

- Respondent size and growth rates, based on available data, are shown in Exhibit 3.

- The respondent companies view themselves as being in multiple markets (Exhibit 4).

  - Originally, it was planned to segment companies by whether they were in the federal market or not.

  - However, only one company saw itself as only in the federal market, so that segmentation was not feasible.

- The respondents generally see themselves as having many competitors (Exhibit 5). These competitors are varied, including professional service firms, processing firms, accounting firms and, increasingly, hardware companies.

III. Pricing and Factors Affecting Pricing

- The average 1983 rate per hour ranges from $101 for an account manager to $39 for a junior programmer (Exhibit 6). The titles and definitions are those used by Martin Marietta; respondents noted where their definitions differed.

  - Exhibit 7 shows the data for each company.

EXHIBIT 3

RESPONDENT PROFILES: NON-CAPTIVE PROFESSIONAL SERVICES DATA

	1981 REVENUES ($ MILL)	PERCENTAGE GROWTH (1980 TO 1981)
EDS	$ 206	17%
INFORMATICS	34	10%
CSC/INFONET	389	15%
KEANE ASSOCIATES	12	-1.3%
GEISCO	56	
LTI	See GEISCO	-
AMERICAN MANAGEMENT SYSTEMS	31	3%
DATACARE	*	
MC AUTO	20	16%
ARTHUR ANDERSEN	191	30%
A.O. SMITH	*	
DASD	22	12%
SPIRADELLIS	14	44%
MONCHIK WEBER	10	98%
CDC	80	14%
EDS/FEDERAL SYSTEMS	See EDS	-
ASK	**	-

* NO DATA AVAILABLE
** NO PROFESSIONAL SERVICES REVENUES REPORTED

INPUT

EXHIBIT 4

PRIMARY AND SECONDARY PROFESSIONAL SERVICE AREAS

(P=Primary, S=Secondary)

VENDOR	COMM'L	GOVERNMENT FED. ADP	GOVERNMENT ECS	GOVERNMENT NON-FED.	MFG.	BANKING/ FINANCE	HEALTH	OTHER
EDS	P				P			P
Informatics	P	P		P	S	P	S	
CSC/Infonet	P				S	P	S	
Keane Assoc.	P				P		S	
GEISCO	P	S			P	P	S	
LTI	P			P	P	P	S	
American Mgmt. Sys.							P	
Datacare								
McAuto	P	P		P	P	P	P	
Arthur Andersen	P	S		S	P	P	P	
A.O. Smith					S	P		
DASD	P				P	P	P	
Spiradellis	P	S	S	S	S	P	P	
Monchik-Weber	S					P		
CDC	P	P	S	S	P	S	P	
EDS/Fed. Sys.		P		P				

EXHIBIT 5

PRIMARY COMPETITION

VENDOR	COMPETITORS (* = FUTURE)
EDS	*Burroughs, *IBM, *Data General
Informatics	CSC, Planning Research
CSC/Infonet	Other RCS firms - Price; Consulting Cos. - Flexibility
Keane Associates	Computer manufacturers*
GEISCO	In-house, McAuto, Boeing, Tymshare, Rapidata, *IBM, *American Telephone
LTI	Big 8 accounting firms
American Mgmt Sys	Booz Allen, McKinzey, Arthur Andersen, Peat Marwick, *Arthur Young & Co.
Datacare	Technicon
McAuto	Arthur Andersen, Informatics, Boeing, In-house, *Big 8
Arthur Andersen	Big 8, AMS, CSC, EDS, Booz Allen, A.D. Little (a bit)
A.O. Smith	Applied Comms. Inc. (ACI), ANACOMP-Kransley, GEISCO (Bank Systems)
DASD	EDS, CSC, Computer Task Group
Spiradellis	Lambda, CGA, OSI
Monchik Weber	Consulting - Big 8; Devel. - in-house, body shops and independents, Production - (ADP) any D.P. production services
CDC	*Small education courseware cos. - Micro cos. A.D. Little - established market presence; IBM - reputation, products; Computervision - strong products; McAuto, CSC
EDS/Fed. Sys.	CSC, Planning Research, SDC/Burroughs, CDSI, CACI

EXHIBIT 6

1983 RATES (AVERAGE)

cut scope to Senior people only.

TITLE	RATE
ACCOUNT MANAGER	$101
PROJECT LEADER	79
PRINCIPAL CONSULTANT	97
SENIOR CONSULTANT	91
CONSULTANT	76
PRINCIPAL DESIGNER	69
SR. SYSTEMS ANALYST	60
SYSTEMS ANALYST	50
JR. SYSTEMS ANALYST	45
SR. PROGRAMMER	47
PROGRAMMER	41
JR. PROGRAMMER	39

EXHIBIT 7

1983 $'s RATES (* = Variance from Definition - See Exhibit 8)

VENDOR	ACCT MGR	PROJ LEAD	PRIN CONS	SR CONS	CONS	PRIN DES	SR SA	SA	JR SA	SR PROG	PROG	JR PROG
EDS	* 55	* 55	* 55	* 55	* 55	* 55	*55	*55	*55	*55	*55	*55
Informatics	60	80	55	50	50	40	37	37	35	40	30	30
CSC/Infonet	N/A	63	70	71.50	63	54	47	39	34	47	39	34
Keane Assoc.	N/A	N/A	62.50	37.50	25	25	25	25	18.75	18.75	18.75	18.75
GEISCO	* 90	* 90	125	105	105	* 80	*80	70	60	70	60	52.50
LTI	All Proprietary											
American Mgmt. Sys.	*117.50	*117.50	117.50	65	55	85	52	42	35	47	35	N/A
Datacare	80	70	90	90	N/A	80	80	70	55	80	70	55
McAuto	See Exhibit 8											
Arthur Andersen	160	125	175	160	125	80	*52			*		*
A.O. Smith		* 90	*110	*110		90	75		65			
DASD		42	65	50	45	42		35	N/A	30	N/A	N/A
Spiradellis	N/A	60	90	80	65	72.50	55	55		45	35	N/A
Monchik-Weber		*137	137	100	100	*80	80	65		50	40	
CDC			175	150	131	100	76	65	55	45	41	37
EDS/Fed. Sys.												
ASK	* 65	*65	* 65	* 65	* 65	* 65	*65	*65	*65	*65	*65	*65

Sole source Vendors - Saudi Computer Systems must govern

INPUT

- Note the larger variation between companies.

  . Generally, the ratio between the most and least expensive company was largest in the more senior positions.

  . This ratio was not affected by whether a company used the same title definition as Martin Marietta.

- Variations between respondent title definitions and those of Martin Marietta are shown in Exhibit 8.

- Exhibit 9 shows the expectd rate increase, from 1981 to 1984, using 1980 as the base year.

  - Note how the percent change closely mirrors the inflation rate.

  - Exhibit 10 provides this same data for each respondent.

    . GEISCO sees the greatest increase from 1980 to 1984, and Datacare, EDS and Informatics the least.

    . AMS sees the biggest change between 1983 and 1984 and Datacare the least.

EXHIBIT 8

VARIANCES IN RESPONDENT TITLE STRUCTURE

EDS

- Same rate for all staff levels.
- $90 for new customers.

GEISCO

- Account/Field Manager and Project Leader both included in "Project Manager".
- Principal System Designer and Senior System Analyst both included in "Senior Applications Specialist".

AMS

- Account/Field Manager and Project Leader both included in "Principal" or "Vice President".

MC AUTO

- Rates proprietary.
- Following titles are same as Martin Marietta.
  - Project Leader (5-8 years experience)
  - Consultant Series
  - Programmer

- Following titles vary
  - Sr. Systems Analyst and Sr. Programmer are combined in "Sr. Programmer Analyst".
  - There are no Junior Systems Analysts.
  - Junior Programmer is called "Associate Programmer".
- In addition there is the title "Executive Consultant", with 15-20 years experience.

ARTHUR ANDERSEN

- In the top five Martin Marietta titles there is a general consistency of titles, but with broader rate ranges:

MARTIN MARIETTA	ARTHUR ANDERSEN	$ RANGE
Account/Field Mgr.	Young Partner/Top Mgr.	$140-180
Project Leader	Younger Manager	$110-140
Principal Consultant	Young Partner or Top Manager	$150-200
Senior Consultant	Young Partner or Top Manager	$140-180
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- A Principal System Designer is equated to a Senior Systems Analyst.

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Datacare		20%		Static
McAuto				
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- Competition and costs were seen as the most important factors affecting pricing and inflation and turnover the least important (Exhibit 11).

  - Note, however, that cost/inflation and personnel shortage/turnover are each closely related.

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(SUMMARY)

FACTOR	IMPORTANCE*
COMPETITION	3.7
COSTS	3.6
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PERSONNEL SHORTAGE	3.2
CUSTOMERS' FINANCES	3.0
INFLATION	2.6
TURNOVER	2.3

* 1 = LOW, 5 = HIGH

EXHIBIT 12

IMPORTANCE OF FACTORS ON BILLING RATES

VENDOR	INFLATION	TURNOVER	COSTS	CUSTOMERS' FINANCES	PERSONNEL SHORTAGES	COMPE-TITION	TOOLS
EDS	4	2	3	1	1	1	1
Informatics	5	3	5	4	4	4	2
CSC/Infonet	1	1	1	1	4	5	3
Keane Assoc.	1	1	3	5	3	3	5
GEISCO	3	1	2	4	1	4	4
LTI							
American Mgmt. Sys.	3	4	4	2	3	5	4
Datacare		2	5	3	2	4	DK
McAuto	4	1	4	2	3	3	3
Arthur Andersen	2	2	3.5	3	4		1
A.O. Smith	1	1	5	5	5	5	5
DASD	3	5	4	3	4	2	
Spiradellis	2	3	3	4	5	4	5
Monchik Weber	4	2.5	4	3	4	4	3
CDC	3	1	4	2	2	4	5
EDS/Fed. Sys.	1	5					

EXHIBIT 13

VARIATIONS FROM STANDARD RATES

VENDOR	CUST. TYPE	APPL. TYPE	AMOUNT OF COMPETITION	GEOGRAPHY	EXPERTISE	OTHER
EDS						
Informatics	X		X		X	
CSC/Infonet						X
Keane Assoc.					X	
GEISCO	X		X			
LTI			X	X		
American Mgmt.						
Datacare			X		X	
McAuto						
Arthur Andersen				X	X	
A.O. Smith	X		X		X	
DASD	X				X	
Spiradellis			X	X	X	
Monchik-Weber						
CDC	X					
EDS/Fed. Sys.						

INPIT

EXHIBIT 14

DISCOUNTS

VENDOR	YES	NO	DETAILS
EDS		X	
Informatics	X		Rarely.
CSC/Infonet	X		Contracts over $100K.
Keane Assoc.	X		Multiple sales installations or long contracts.
GEISCO	X		On site work, long term, meet competition.
LTI			Proprietary.
American Mgmt. Systems	X		Government procurement regulations.
Datacare	X		Assessment of competition and geographic location of client.
McAuto	X		Competitive, size of contract, multi-year.
Arthur Andersen	X		Only if partner or division decide to propose to do work for less, or government contracts.
A.O. Smith		X	
DASD	X		Only on large jobs.
Spiradellis	X		Annual volume discounts, rebate based on turnover.
Monchik-Weber		X	
CDC		X	Four types of hourly volume discounts in all categories.
EDS/Fed. Sys.			Cost build ups - need to demonstrate profit won't exceed certain % of costs.

INPUT

EXHIBIT 15

BILLING PRACTICES FOR TASK-ORIENTED WORK

VENDOR	TASK-ORIENTED SAME AS T+M? YES	NO	REASONS
EDS	X		No distinction.
Informatics		X	Task order is higher and includes mgmt. responsibility.
CSC/Infonet	X		Company policy because of volume and % of federal government business.
Keane Assoc.		X	Would benefit customer if project similar to another.
GEISCO	X		Better estimates on module basis.
LTI	X		No tools to reduce time effort.
American Mgmt. Systems	X		Work fixed priced by deliverables.
Datacare	X		Have no reason not to.
McAuto	X		Cost build up rather than value or market pricing.
Arthur Andersen	X		Billing rates related to experience.
A.O. Smith	X		No task to hang dollar on - either FP or T+M.
DASD	X		Majority of work is T+M - easier to treat in same manner.
Spiradellis	X		Cost structures are the same except for contingency factors.
Monchik-Weber	X		Only have one set of rates.
CDC	X		
EDS/Fed. Sys.	X		Costs don't change - same cost basis.

EXHIBIT 16

FIXED PRICE PROPOSALS

VENDOR	FIXED PRICE USES SAME RATE STRUCTURE AS T+M	SURCHARGE YES	SURCHARGE NO
EDS	Lower rates for addt'l development for existing customer		X
Informatics	No fixed price		N/A
CSC/Infonet	No fixed price		N/A
Keane Assoc.	Depends on company and for what		X
GEISCO	Very little fixed price	X	
LTI	Start at T+M but much grey area	X	
American Mgmt. Sys.	Yes	X	
Datacare	Attempt		X
McAuto	Yes	X	
Arthur Andersen	Yes, rare fixed price except with government	X	
A.O. Smith	No, fixed price is based on competition		X
DASD	Yes, majority of work is T+M, easier to treat the same	X	
Spiradellis	Yes, cost structures are the same except for contingencies	X	
Monchik Weber	Yes, only have 1 set of rates	X	
CDC	Yes	X	
FDS/Fed. Sys.	Yes, costs don't change		

INPUT

APPENDIX A:

QUESTIONNAIRE

PROFESSIONAL SERVICES PRICING PRACTICES

INPUT is a research and consulting firm in Saddle Brook, NJ. We are conducting a study on professional service firms' pricing practices. In return for your taking part in our study, we will send you a summary of our report at no charge.

1. Is your professional service business nationwide or is most of your work conducted in particular geographic areas?

   ☐ Nationwide

   ☐ Particular areas - Which ones?

   _____

   _____

   _____

   _____

CATALOG NO. [ ][ ][ ][ ][ ][ ]

2. Is each of the following customer or product areas a primary or secondary priority for your professional services activities?

	Primary	Secondary
Commercial Accounts	_____	_____
Government Accounts	_____	_____
Federal ADP	_____	_____
Federal Embedded Computer (Weapons) Systems	_____	_____
State and Local	_____	_____
Manufacturing Applications	_____	_____
Banking and Finance Applications	_____	_____
Health Care Applications	_____	_____
Other (describe)	_____	_____

3a. What professional service firms do you see as your primary competition now? What do you see as their strengths?

_____

_____

_____

_____

3b. What other firms do you think might be added to that list in two or three years?

_____

_____

_____

5a. When producing a fixed price proposal, do you use the same rate structure as used on T&M projects for project personnel?

☐ Yes ☐ No

If NO, describe differences: _____

_____

_____

5b. Where not doing fixed price work, do you use the same billing rate for straight T&M engagements as for task-oriented engagements (even if billed for on a T&M basis)?

☐ Yes ☐ No

Why? _____

_____

_____

If NO, discuss differences: _____

_____

_____

5c. Is a "surcharge" or "contingency factor" added to fixed price proposals over and above the result produced by your billing rate calculations (includes measuring number of hours)?

☐ Yes ☐ No

If YES, how much, on the average? _____

6. How important is each of the following factors in affecting changes in your billing rates (1 = low, 5 = high)? Why?

	Importance	Reason
General Inflation Rate		
Your Firm's Personnel Turnover		
Your Cost Structure		
Your Customers' Economic Conditions		
Personnel Shortages		
Your Competitors' Rates		
Proprietary Productivity Tools or Approaches		

7. If the average billing rates for your firm's management and technical staff equalled 100 in 1980, how would you see this index changing for your firm in each year up to 1984? Why?

Year	Index	Reason
1980	100	
1981		
1982		
1983		
1984		

8. Do you have formal variations (either higher or lower) from your standard rates related to:

	Yes	No
• Type of Customer (e.g., commercial vs. government)	_____	_____
• Application Type (e.g., manufacturing vs. general commercial)	_____	_____
• Competitive vs. Noncompetitive Situations	_____	_____
• Geographic Area	_____	_____
• Special Expertise	_____	_____
• Other (describe) _____	_____	_____

FOR ALL AREAS ANSWERED "YES," ASK:

- Why?
- Give some examples.
- How large is the variance?

COMPLETE ANSWERS ON ATTACHED SHEET.

8). DESCRIPTION OF RATE VARIATION

Area	Reason	Examples	Size of Variance
Type of Customer (e.g., commercial vs. government)			
Application Type (e.g., manufacturing vs. general commercial)			
Competitive vs. Noncompetitive Situations			
Geographic Area			
Special Expertise			
Other (describe)			

CATALOG NO. 1251-11

Do you ever give discounts from your standard rates?

☐ Yes ☐ No

IF YES:

- Under what conditions? _____

  _____

- How is this accomplished (e.g., reducing hourly rates, reducing billed hours, changing job categories, cost plus fixed fee)?

  _____

  _____

  _____

- About how often does this occur?

  _____

- About what percentage reduction from your standard rates is your typical discount? (May be one number or a range.)

  _____

10. Could you provide me with your current (1983) rates per hour for the following categories? We have defined each title as including specific years of experience; if you do not use exactly the same definition, please provide the rate for the closest title and tell me what your definition is.

Title	Years Experience *	Title Variance	1983 Rate ($ per hour)
Account/Field Manager	9 - 12		
Project Leader	7 - 10		
Principal Consultant (in a specialized area)	10 - 15		
Senior Consultant (in a specialized area)	9 - 12		
Consultant (in a specialized area)	8 - 10		
Principal System Designer	7 - 10		
Senior Systems Analyst	5 - 7		
Systems Analyst	2 - 5		
Junior Systems Analyst	0 - 2		
Senior Programmer	5 - 7		
Programmer	2 - 5		
Junior Programmer	0 - 2		

* Not including education.

11. Do you furnish a schedule of professional service rates to prospective clients?

☐ Yes ☐ No

IF YES: Would you send INPUT a copy?

☐ Yes ☐ No

INPUT

PARK 80 PLAZA WEST-1, SADDLE BROOK, NEW JERSEY 07662 (201) 368-9471

August 24, 1983

Mr. Don McCullough
Martin Marietta Data Systems
6301 Ivy Lane, Suite 300
Greenbelt, MD 20770

Dear Don:

Congratulations on the new member of the Martin - Marietta family, Mathematica. I used to know them quite well years ago.

I have enclosed a draft of the "Thank you" package which we will send to respondents. Please look it over to see if you have any comments.

Sincerely,

Thomas O'Flaherty
Principal Consultant

TOF/ih

Enclosure

TDR

Overview
Compare to regular sdlc
-same
-diff

PROFESSIONAL SERVICES PRICING PRACTICES

research firm
copy within
30 days

PREPARED FOR

MARTIN MARIETTA DATA SYSTEMS

MAY 11, 1983

FIRMS INTERVIEWED

EDS
INFORMATICS
CSC/INFONET
KEANE ASSOCIATES
GEISCO
LTI
AMERICAN MANAGEMENT SYSTEMS
DATACARE
MC AUTO
ARTHUR ANDERSEN
A.O. SMITH
DASD
SPIRADELLIS
MONCHIK-WEBER
CDC
EDS/FEDERAL SYSTEMS

INTERVIEWEE TITLES

SYSTEMS ENGINEERING MANAGER
VICE PRESIDENT OPERATIONS
MANAGER, PROFESSIONAL SERVICES
MANAGER FINANCE, SYSTEMS DEVELOPMENT & CONSULTANTS
SENIOR VICE PRESIDENT
MANAGER OF GOVERNMENT PROGRAMS
DIRECTOR OF ADMINISTRATIVE SERVICES
MANAGER OF MARKET RESEARCH
PARTNER
DIRECTOR OF PLANNING
SENIOR VICE PRESIDENT OF DEVELOPMENT
CHIEF OPERATING OFFICER
STRATEGIC PLANNER/PROFESSIONAL SERVICES
GROUP VICE PRESIDENT

Few firm boundaries

add

size, growth rate

EXHIBIT

PRIMARY AND SECONDARY PROFESSIONAL SERVICE AREAS

(P=Primary, S=Secondary)

VENDOR	GOVERNMENT COMM'L	GOVERNMENT FED. ADP	GOVERNMENT ECS	GOVERNMENT NON-FED.	MFG.	BANKING/ FINANCE	HEALTH	OTHER
EDS	P				P			P
Informatics	P	P		P	S	P	S	
CSC/Infonet	P				S	P	S	
Keane Assoc.	P				P		S	
GEISCO	P	S			P	P	S	
LTI	P			P	P	P	S	
American Mgmt. Sys.							P	
Datacare	P	P		P	P	P	P	
McAuto	P	S		S	P	P	P	
Arthur Andersen					S	P		
A.O. Smith	P				P	P	P	
DASD	P	S	S	S	S	P	P	
Spiradellis	S					P		
Monchik-Weber	P	P	S	S	P	S	P	
CDC		P		P				
EDS/Fed. Sys.								

INPUT

EXHIBIT

PRIMARY COMPETITION

VENDOR	COMPETITORS (* = FUTURE)
EDS	*Burroughs, *IBM, *Data General
Informatics	CSC, Planning Research
CSC/Infonet	Other RCS firms - Price; Consulting Cos. - Flexibility
Keane Associates	Computer manufacturers*
GEISCO	In-house, McAuto, Boeing, Tymshare, Rapidata, *IBM, *American Telephone
LTI	Big 8 accounting firms
American Mgmt Sys	Booz Allen, McKinzey, Arthur Andersen, Peat Marwick, *Arthur Young & Co.
Datacare	Technicon
McAuto	Arthur Andersen, Informatics, Boeing, In-house, *Big 8
Arthur Andersen	Big 8, AMS, CSC, EDS, Booz Allen, A.D. Little (a bit)
A.O. Smith	Applied Comms. Inc. (ACI), ANACOMP-Kransley, GEISCO (Bank Systems)
DASD	EDS, CSC, Computer Task Group
Spiradellis	Lambda, CGA, OSI
Monchik-Weber	Consulting - Big 8; Devel. - in-house, body shops and independents, Production - (ADP) any D.P. production services
CDC	*Small education courseware cos. - Micro cos. A.D. Little - established market presence; IBM - reputation, products; Computervision - strong products; McAuto, CSC
EDS/Fed. Sys.	CSC, Planning Research, SDC/Burroughs, CDSI, CACI

INPUT

1983 RATES
(AVERAGE)

TITLE	RATE
ACCOUNT MANAGER	$101
PROJECT LEADER	79
PRINCIPAL CONSULTANT	97
SENIOR CONSULTANT	91
CONSULTANT	76
PRINCIPAL DESIGNER	69
SR. SYSTEMS ANALYST	60
SYSTEMS ANALYST	50
JR. SYSTEMS ANALYST	45
SR. PROGRAMMER	47
PROGRAMMER	41
JR. PROGRAMMER	39

EXHIBIT

1983 $'s RATES (* = Variance from Definition)

3x

2x

VENDOR	ACCT MGR	PROJ LEAD	PRIN CONS	SR CONS	CONS	PRIN DES	SR SA	SA	JR SA	SR PROG	PROG	JR PROG
EDS	* 55	* 55	* 55	* 55	* 55	* 55	*55	*55	*55	*55	*55	*55
Informatics	60	80	55	50	50	40	37	37	35	40	30	30
CSC/Infonet	N/A	63	70	71.50	63	54	47	39	34	47	39	34
Keane Assoc.	N/A	N/A	37.50	62.50	25	25	25	25	18.75	18.75	18.75	18.75
GEISCO	* 90	* 90	125	105	105	* 80	*80	*70	60	70	60	52.50
LTI												
American Mgmt. Sys.	*117.50	*117.50	117.50	65	55	85	52	42	35	47	35	N/A
Datacare	80	70	90	90	N/A	80	80	70	55	80	70	55
McAuto												
Arthur Andersen	*160	*125	*175	*160	*125	80	*52			*		*
A.O. Smith		* 90	110	110		* 90	*75		65			
DASD		42	65	50	45	42		35	N/A	30	N/A	N/A
Spiradellis	N/A	60	90	80	65	72.50	55	55		45	35	N/A
Monchik-Weber		* 80	100	137.50	100	80	80	65		50	40	
CDC			175	150	131	100	76	65	55	45	41	37
EDS/Fed. Sys.												

most very

precached

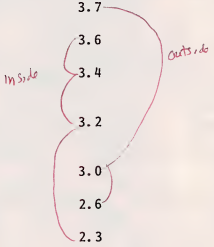
INPUT

w/ VGR 55-160 | 42-125 | 38-175 | 50-160 | 45-131 | 40-160 | 37-80 | 37-70 | 34-65 | 30-80 | 35-70 | 30-55

w/o VGR 42-80 | " | 50-150 | " | " | " | " | " | " | " | "

IMPORTANCE OF FACTORS ON BILLING RATES (SUMMARY)

FACTOR	IMPORTANCE*
COMPETITION	3.7
COSTS	3.6
TOOLS	3.4
PERSONNEL SHORTAGE	3.2
CUSTOMERS' FINANCES	3.0
INFLATION	2.6
TURNOVER	2.3



* 1 = LOW, 5 = HIGH

EXHIBIT

IMPORTANCE OF FACTORS ON BILLING RATES

VENDOR	INFLATION	TURNOVER	COSTS	CUSTOMERS' FINANCES	PERSONNEL SHORTAGES	COMPE-TITION	TOOLS
EDS	4	2	3	1	1	1	1
Informatics	5	3	5	4	4	4	2
CSC/Infonet	1	1	1	1	4	5	3
Keane Assoc.	1	1	3	5	3	3	5
GEISCO	3	1	2	4	1	4	4
LTI							
American Mgmt. Sys.	3	4	4	2	3	5	4
Datacare		2	5	3	2	4	DK
McAuto	4	1	4	2	3	3	3
Arthur Andersen	2	2	3.5	3	4		1
A.O. Smith	1	1	5	5	5	5	5
DASD	3	5	4	3	4	2	
Spiradellis	2	3	3	4	5	4	5
Monchik-Weber	4	2.5	4	3	4	4	3
CDC	3	1	4	2	2	4	5
EDS/Fed. Sys.	1	5					

INPUT

BILLING RATE INCREASES
(AVERAGE)

YEAR	INDEX	PERCENT CHANGE
1980	100	-
1981	109	9%
1982	118	8%
1983	123	4%
1984	130	6%

Infl low but

≈ 10

5

und 5

?

EXHIBIT

BILLING RATE INCREASES (1980 = 100)

VENDOR	1981	1982	1983	1984
EDS	100	110	115	120
Informatics	110	115	115	120
CSC/Infonet	110	120	120	130
Keane Assoc.				
GEISCO	116	130	142	153
LTI				
American Mgmt. Sys.	100	110	110	125
Datacare		20%		Static
McAuto				
Arthur Andersen	110	123	133	136
A.O. Smith				
DASD	110	118	124	
Spiradellis	110	113	121	127
Monchik-Weber	108	122	122	128
CDC	112	119	125	128
EDS/Fed. Sys.	112	120	126	133

INPUT

EXHIBIT

VARIATIONS FROM STANDARD RATES

VENDOR	CUST. TYPE	APPL. TYPE	AMOUNT OF COMPETITION	GEOGRAPHY	EXPERTISE	OTHER
EDS						
Informatics	X		X		X	
CSC/Infonet						X
Keane Assoc.					X	
GEISCO	X		X			
LTI			X	X		
American Mgmt.						
Datacare			X		X	
McAuto						
Arthur Andersen				X	X	
A.O. Smith	X		X		X	
DASD	X				X	
Spiradellis			X	X	X	
Monchik-Weber						
CDC	X					
EDS/Fed. Sys.						

INPUT

EXHIBIT

DISCOUNTS

VENDOR	YES	NO	DETAILS
EDS		X	
Informatics	X		Rarely.
CSC/Infonet	X		Contracts over $100K.
Keane Assoc.	X		Multiple sales installations or long contracts.
GEISCO	X		On site work, long term, meet competition.
LTI			Proprietary.
American Mgmt. Systems	X		Government procurement regulations.
Datacare	X		Assessment of competition and geographic location of client.
McAuto	X		Competitive, size of contract, multi-year.
Arthur Andersen	X		Only if partner or division decide to propose to do work for less, or government contracts.
A.O. Smith		X	
DASD	X		Only on large jobs.
Spiradellis	X		Annual volume discounts, rebate based on turnover.
Monchik-Weber		X	
CDC		X	Four types of hourly volume discounts in all categories.
EDS/Fed. Sys.			Cost build ups - need to demonstrate profit won't exceed certain % of costs.

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EXHIBIT

BILLING PRACTICES FOR TASK-ORIENTED WORK

VENDOR	TASK-ORIENTED SAME AS T+M? YES	NO	REASONS
EDS	X		No distinction.
Informatics		X	Task order is higher and includes mgmt. responsibility.
CSC/Infonet	X		Company policy because of volume and % of federal government business.
Keane Assoc.		X	Would benefit customer if project similar to another.
GEISCO	X		Better estimates on module basis.
LTI	X		No tools to reduce time effort.
American Mgmt. Systems	X		Work fixed priced by deliverables.
Datacare	X		Have no reason not to.
McAuto	X		Cost build up rather than value or market pricing.
Arthur Andersen	X		Billing rates related to experience.
A.O. Smith	X		No task to hang dollar on - either FP or T+M.
DASD	X		Majority of work is T+M - easier to treat in same manner.
Spiradellis	X		Cost structures are the same except for contingency factors.
Monchik-Weber	X		Only have one set of rates.
CDC	X		
EDS/Fed. Sys.	X		Costs don't change - same cost basis.

EXHIBIT

FIXED PRICE PROPOSALS

VENDOR	FIXED PRICE ~~DIFFERENCE FROM~~ T+M	SURCHARGE? YES	NO
EDS	Lower rates for addt'l development for existing customer		X
Informatics	No fixed price		N/A
CSC/Infonet	No fixed price		N/A
Keane Assoc.	Depends on company and for what		X
GEISCO	Very little fixed price	X	
LTI	Start at T+M but much grey area	X ✓	
American Mgmt. Sys.	Yes	X ✓	
Datacare	Attempt	½	X
McAuto	Yes	X ✓	
Arthur Andersen	Yes, rare fixed price except with government	X ✓	
A.O. Smith	No, fixed price is based on competition	✓	X
DASD	Yes, majority of work is T+M, easier to treat the same	X ✓	
Spiradellis	Yes, cost structures are the same except for contingencies	X ✓	
Monchik-Weber	Yes, only have 1 set of rates	X ✓	
CDC	Yes	X ✓	
EDS/Fed. Sys.	Yes, costs don't change	✓	

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PARK 80 PLAZA WEST-1, SADDLE BROOK, NEW JERSEY 07662 (201) 368-9471

January 20, 1983

Mr. Don McCullough
Martin-Marietta Data Systems
6801 Rockledge Drive
Bethesda, Maryland 20034

Dear Mr. McCullough:

This letter is a response to the telephone conversations that Mr. Tom O'Flaherty and I had with you last week concerning INPUT performing a custom study for Martin-Marietta Data Systems on professional service firms' pricing practices.

We are appreciative that you have looked to INPUT for this study and we believe that your confidence is well placed. In the last year, we have conducted a wide range of studies identifying business practices in the information service industry.

The remainder of this letter is divided into the following sections:

- o INPUT's Understanding
- o Scope
- o Methodology
- o Schedule and fee

INPUT's Understanding

Martin-Marietta Data Systems (MMDS) Professional Services Group wishes to obtain up-to-date and detailed information on pricing and associated business practices of its competitors.

MMDS requires this information on competitors who are factors in both the government market as well as the general commercial market (excluding single industry specialist firms such as SEI). MMDS is particularly interested in competitors who do considerable work on a project basis (e.g., T&M work with a project management component and fixed price jobs).

Scope

In the course of the study, the following issues will be addressed:

- o What are the 1982 & 1983 hourly rates, by major position categories?
  - Why are rates changing?

Follow up
Imp at pace

- What are the expected trends?

o Are the same rates used for T&M jobs as for fixed price jobs?

o What are levels of effective discounts?

  - Under what conditions are they given?

  - How are they given (changing billed hours, changing assigned job categories, etc.)?

o How significant are variations from standard rates due to such factors as:

  - Type of industry

  - Region

  - Technical focus

  - Special expertise

o How do professional service firms see rates being affected by,

  - Advances in productivity techniques (either public or proprietary)

  - Turnover rates

  - Personnel shortages

Methodology

o INPUT will use its best efforts to interview 18 professional service firms, with equal priority given to those in the government and commercial sectors

  - INPUT will develop a questionnaire and review it with MMDS

  - The list of firms to be interviewed will be agreed to jointly by INPUT and MMDS

o Respondents will be offered a summary of the study as a incentive for taking part in the study.

- The data required by MMDS is sensitive information. This will have the following effects on this project:
  - More firms than average may be unwilling to participate; this may necessitate adding more firms to the target list.
  - Some firms may only participate if interviews are held on site; since on site interviews will add to time and expense, such firms will only be interviewed if necessary for the study's success. If this is required and will involve additional expense, MMDS approval will be required.
  - Only a small number of people in some firms may be authorized to release this type of data; this will add to the elapsed time needed to gain interviews.

Schedule & Fee

The schedule is as follows:

- Week 1: Design and review questionnaire
- Week 2-4: Interviews
- Week 5: Analysis and preparation of report
- Week 6: Presentation of results to MMDS
- Week 8: Delivery of final written report

The professional fee for this study is $12,500. Out-of-pocket expenses will be billed at cost. Any additional professional fee or out-of-pocket expense required to conduct on site interviews will be approved by MMDS in advance. If in the course of the study, it becomes apparent that it is not possible to obtain the quality and/or quantity of data for a satisfactory report, INPUT will recommend termination and only bill for time and expense incurred.

INPUT looks forward to working with MMDS on this project. If you have any questions, about this proposal please do not hesitate to call Tom O'Flaherty or myself.

Sincerely,

Edward I. Metz

Edward I. Metz
Senior Vice President

AUTHORIZED BY MMDS

Donald McCullough
NAME

Product Director, Prof. Svcs.
TITLE

February 8, 1983
DATE

ACCEPTED BY INPUT

NAME

Principal Consultant
TITLE

Feb 8, 1983
DATE

Where not doing fixed price work,

5b. Do you use the same billing rate for straight T&M engagements as for task-oriented engagements (even if billed for on a T&M basis)?

☐ Yes ☐ No

Why? _____

_____

_____

_____

IF NO, discuss differences: _____

_____

_____

_____

5a. When producing a fixed price proposal, do you use the same rate structure as used on T&M projects for project personnel?

☐ Yes ☐ No

IF NO, describes differences: _____

_____

_____

5c. Is a "surcharge" or "contingency factor" added to fixed price proposals over and above the result produced by your billing rate calculations? (Include increasing number of hours)

☐ Yes ☐ No

IF YES, how much, on the average? _____

COMMERCIAL COMPETITORS - 18

Computer Sciences Corporation
* Arthur Anderson & Co., (SDM similar to Method 1)
? - * IBM
GEISCO (Lambda Technology)
Electronic Data Systems
Computer Task Group, Inc.
DASD Corporation
CGA Computer Associates
American Management Systems not so much
Burroughs (SDC)
Informatics
* COMSERV Corporation
* MSA (Arista)
* Hewlett-Packard
* ASK Computer, Inc.
Peat, Marwick and Mitchell
* Cullinane/Rath & Strong
Keane Associates - Phil) NYC + Orlando
Spradellis

* Also for Manufacturing Systems

GOVERNMENT COMPETITORS -13

Computer Sciences Corporation
Electronic Data Systems
Burroughs (SDC)
Planning Research Corporation
Control Data Corporation
Boeing Computer Services
* McAuto
Informatics
* Shared Medical Systems
* Technicon
* Datacare
7. — * IBM PCS
Datacrown

* Government Medical Facilities

Ed - Re Martin-Marietta (YPSP)

- Reached agreement with M-M on questionnaire (see attached - a few small changes which I have put into typing (for a cut & paste))

- If Carl is free to do some interviews, * that would be good (There may not be easy & a senior person would help)

  - I said that we would call next Mon or Tues to give them a sense of how receptive people ~~would be~~ are to giving interviews & how much we think we can get. (I have warned them that is not easy)

- I'll call Wed pm if you or Carl have any questions

Tom

* important

PROFESSIONAL SERVICES COMPETITORS

FEDERAL

12/14/82

- 1983 -

	11/82 CSC	EST83 DATA-CROWN	EST83 INFOR-MATICS	EST83 AMS	EST83 UNITED COMP	EST83 EDS FED'L	EST83 PRC	EST83 CDC	07/82 ON LINE SYSTEMS
SR DB CONSULTANT	65.00								
PRINCIPAL CONSULTANT	75.00							84.00	100.00
SR CONSULTANT	45.00	66.00						76.00	85.00
FLD/ACT MANAGER						43.00			
PROJECT MANAGER	45.00					43.00			90.00
DATA BASE CONSULTANT									
CONSULTANT	57.00						48.00		65.00
SPECIALIST	49.00	42.00					41.00		
SR SYSTEM ANALYST	45.00	60.00	37.00		58.00	36.00		65.00	
SYSTEM ANALYST	35.00	56.00	34.00	44.00	42.00	32.00	39.00	54.00	45.00
JR SYSTEM ANALYST	36.00							44.00	
SR PROGRAMMER	35.00	50.00	30.00	51.00		32.00	39.00		
PROGRAMMER	30.00	42.00	27.00			29.00	35.00	40.00	35.00
JR PROGRAMMER	25.00		24.00			22.00	22.00		
COMMUNICATIONS ANALYST	49.00	32.00		65.00	42.00				40.00
LEAD DOC SPECIALIST	35.00								
SR DOC SPECIALIST						22.00			
DOC SPECIALIST						20.00			30.00
DATA PREP SPECIALIST									
CLERK/TYPIST						12.00			
DATA ENTRY OPERATOR									
LEAD COMPUTER OPERATOR	20.00								
SR COMPUTER OPERATOR									
COMPUTER OPERATOR									

M-M Info- background

PROFESSIONAL SERVICES COMPETITORS
COMMERCIAL
1983

	08/81 Input	11/82 Keane	11/82 P.S.I	08/82 McAuto	05/82 Allen Serv.	02/82 Omega	11/82 Univac	04/82 Sys Hse	03/82 DASD	11/82 A.A.Co.	01/82 Ask Comp.	01/82 Wrldwide Computer
Sr DB Consultant												
Prin. Consultant	103.00	-	-	136.00	-	-	-	-	-	120.00	-	69.00
Sr. Consultant	80.00	67.00	-	115.00	-	-	-	-	36.00	90.00	-	56.00
FLD/ACT Manager	-	-	-	135.00	-	-	-	-	-	-	-	-
Project Manager	75.00	60.00	46.00	112.00	-	45.00	-	45.00	-	75.00	-	56.00
DB Consultant	-	-	42.00	107.00	-	-	-	38.00	-	-	-	-
Consultant	58.00	-	-	107.00	-	-	-	-	-	55.00	63.00	-
Specialist	-	-	-	100.0	45.00	-	-	36.00	-	-	-	-
Sr. Sys. Analyst	-	55.00	39.00	91.00	38.00	45.00	36.00	40.00	34.00	50.00	65.00	-
Systems Analyst	55.00	38.00	36.00	83.00	35.00	37.00	31.00	38.00	30.00	-	-	45.00
Jr. Sys. Analyst	-	-	-	70.00	-	-	26.00	-	25.00	-	-	41.00
Sr. Programmer	35.00	38.00	34.00	75.00	38.00	37.00	36.00	36.00	32.00	45.00	-	38.00
Programmer	25.00	-	27.00	63.00	35.00	35.00	31.00	34.00	26.00	30.00	40.00	33.00
Jr. Programmer	-	-	-	56.00	32.00	30.00	26.00	30.00	-	23.00	-	23.00
Communications Anal.	-	-	-	-	-	-	-	38.00	-	-	-	-
Lead Doc. Specialist	-	-	-	53.00	-	-	-	-	-	45.00	-	-
Sr. Doc Specialist	23.00	-	-	-	-	30.00	-	-	-	-	-	28.00
Doc Specialist	-	-	-	-	-	-	-	-	-	-	-	-
Data Prep Spec.	-	-	-	-	-	-	-	-	-	-	-	-
Clerk/Typist	-	-	-	-	-	-	-	-	-	-	-	-
Data Entry Oper.	-	-	-	-	-	-	-	-	-	-	-	-
Lead Comp. Oper.	-	-	-	-	-	-	-	-	-	-	-	-
Sr. Comp. Oper.	-	-	-	-	-	-	-	-	-	-	-	-
Computer Oper.	-	-	-	-	-	-	-	-	-	-	-	-

MM Info - Background

MARTIN MARIETTA
DATA SYSTEMS

PROFESSIONAL SERVICES

MMDS Application Products Rate Schedule

HOURLY BILLING RATE

Field Manager	$75.00
Project Manager	70.00
Principal Consultant	95.00
Senior Data Base Consultant	85.00
Data Base Consultant	75.00
Senior Consultant	80.00
Consultant	75.00
Functional System Designer	60.00
Computer System Designer	55.00
Senior Customizer	60.00
Customizer	55.00
Test and Delivery	60.00
Documentation Support	35.00
Data Preparation	30.00
*Clerical/Typing/Word Processing	30.00

*Hardware costs included.

PROFESSIONAL CLASSIFICATIONS

Field Manager—Senior level MMDS manager who monitors performance against the scope of work, and contract schedules and plans. The MMDS project manager reports directly to this individual. Field managers provide the principle interface with the customer on contract performance and staffing. (9-12 years experience)

Project Manager—The MMDS project leader who plans, monitors and directs the MMDS efforts under a contract. Responsible for all on-site efforts, as well as customizing and off-site efforts performed by MMDS. (7-10 years experience)

Principal Consultant—Top level consultant within a function (software, applications, operations, communications, etc.), who is capable of advising senior management within the technical or functional organizations. (10-15 years experience)

Senior Data Base Consultant—Top level data base administrator who is capable of structuring, leading and advising on the data base function within an organization. (9-12 years experience)

Data Base Consultant—Consultant who is a specialist in data base design concepts. This individual is knowledgeable of and can advise on the specific systems being designed or delivered to customers. (8-10 years experience)

Senior Consultant—Senior level individual who advises on systems functions and management utilization of systems. Primarily addresses how systems affect business disciplines and how procedures and organizations need to change to best take advantage of the systems' capabilities. (9-15 years experience)

Consultant—Individual who works directly with line and data processing organizations to develop methods and procedures for systems installation and implementation. (8-10 years experience)

Functional System Designer—Individual who develops or revises the functional design of the system with the end user. A Functional System Design document is the end product of this task. (5-7 years experience)

PROFESSIONAL SERVICES

MMDS Application Products

January 1983

Rate Schedule

Computer System Designer—Individual who translates the functional design into the computer system design. Where a current CSD exists, it is based on the functional differences requested by the customer. A Computer System Design document is the end product of this task. (5-7 years experience)

Senior Customizer—Senior level individual who has extensive technical knowledge of the standard application system to be modified. (5-7 years experience)

Customizer—The technical specialist who modifies the current system to meet the modified CSD. (2-5 years experience)

Test and Delivery—Individual who is responsible for installing and testing systems on customer computers. Systems are demonstrated through test procedures developed for each element of the product. (5-7 years experience)

Documentation Support—Technical writers who modify and prepare updated versions of system documentation. (2-5 years experience)

Data Preparation—Individual who develops, records or modifies routine data. (1-3 years experience)

Clerical/Typing/Word Processing—Individuals who are associated with document handling, typing, or capturing data on word processing equipment.

MARTIN MARIETTA

MARTIN MARIETTA
DATA SYSTEMS

PROFESSIONAL SERVICES

General
Rate Schedule

COMMERCIAL HOURLY BILLING RATE

Senior Data Base Consultant	$85.00
Principal Consultant	90.00
Senior Consultant	75.00
Field Manager	70.00
Account Manager	70.00
Project Manager	65.00
Data Base Consultant	65.00
Consultant	65.00
Specialist	60.00
Senior Systems Analyst	50.00
Systems Analyst	45.00
Junior Systems Analyst	35.00
Senior Programmer	45.00
Programmer	40.00
Junior Programmer	30.00
Communications Analyst	55.00
Lead Documentation Specialist	50.00
Senior Documentation Specialist	39.00
Documentation Specialist	25.00
*Data Preparation Specialist	21.00
*Clerk/Typist	21.00
*Data Entry Operator	21.00
Lead Computer Operator	30.00
Senior Computer Operator	25.00
Computer Operator	21.00

*Hardware Costs Additional

PROFESSIONAL CLASSIFICATIONS

Senior Data Base Consultant—Top level data base administrator who is capable of structuring, leading, and advising on the data base function within an organization. (9-12 years experience)

Principal Consultant—Top level consultant within a function (software, applications, operations, communications, etc.), who is capable of advising senior management within the technical or functional organizations. (10-15 years experience)

Senior Consultant—Senior level consultant within any function. This position is oriented to technical specialties. (9-12 years experience)

Field Manager/Account Manager—Senior level manager who monitors performance against scope of work, contract schedules and plans. Field and Account Managers provide the principal interface between the customer and MMDS on contract performance and staffing. (9-12 years experience)

Project Manager—The MMDS project leader who plans, monitors and directs the MMDS team on a contract. Responsibilities include both on-site and off-site efforts performed by MMDS. (7-10 years experience)

Consultant (including Data Base)—First level consultant within any function. This position is oriented towards technical specialties. (8-10 years experience)

Specialist—Category which covers MMDS Principal Designers (Computer Systems, Business Systems, and Technical Specialists) in specialized, high technology fields. (7-10 years experience)

Senior Systems Analyst—Individual who is capable of defining requirements and developing or modifying existing functional and computer systems to address them. Responsible for projects where heavy design effort is required. (5-7 years experience)

Systems Analyst—Individual who provides design support in preparing and modifying Functional Systems Designs and Computer Systems Designs as well as other general systems design efforts. (2-5 years experience)

Junior Systems Analyst—This category covers junior level people in the Computer and Functional Systems design areas. Individuals in this category are available only on projects where immediate supervision is available. On-the-job training may be required. (0-2 years experience)

PROFESSIONAL SERVICES

January 1983

General Rate Schedule

Senior Programmer—Lead programmer who supervises a small group of lower level programmers where little specification or design work is required. Primarily performs supervision, coding and related programming tasks. (5-7 years experience)

Programmer—Category for individuals responsible to take programming specifications and perform the programming and testing functions. (2-5 years experience)

Junior Programmer—This category covers junior level programmers. Individuals in this category are available only on projects where immediate supervision is available. On-the-job training may be required. (0-2 years experience)

Communications Analyst—Similar to Systems Analyst for the communications field. (2-5 years experience)

Lead Documentation Specialist—Similar to Senior Systems Analyst for the documentation area. (5-7 years experience)

Senior Documentation Specialist—Similar to Systems Analyst for the documentation area. (2-5 years experience)

Documentation Specialist—Similar to Junior Systems Analyst for the documentation area. (0-2 years experience)

Data Preparation Specialist—Higher level clerical position required for input/output functions.

Clerk/Typist—Self-explanatory.

Data Entry Operator—Keypunch, key to disk type functions.

Lead Computer Operator—Individual who performs, instructs, and makes work assignments for computer operations personnel in a multiprocessing environment. Performs planning, scheduling and quality assurance activities. (5-7 years experience)

Senior Computer Operator—Individual who performs and makes work assignments for computer operations in a multiprocessing environment. Develops shift schedules and can trouble-shoot and adjust hardware. Makes changes to JCL as required. (2-5 years experience)

Computer Operator—Individual who operates, adjusts and trouble-shoots computer operations equipment. Makes minor changes to JCL under supervision. (0-2 years experience)

PROFESSIONAL SERVICES COMPETITORS

FEDERAL

12/14/82

- 1983 -

	11/82 CSC	EST83 DATA-CROWN	EST83 INFOR-MATICS	EST83 AMS	EST83 UNITED COMP	EST83 EDS FED'L	EST83 PRC	EST83 CDC	07/82 ON LINE SYSTEMS
SR DB CONSULTANT	65.00								
PRINCIPAL CONSULTANT	75.00							84.00	100.00
SR CONSULTANT	45.00	66.00						76.00	85.00
FLD/ACT MANAGER						43.00			
PROJECT MANAGER	45.00					43.00			90.00
DATA BASE CONSULTANT									
CONSULTANT	57.00						48.00		65.00
SPECIALIST	49.00	42.00					41.00		
SR SYSTEM ANALYST	45.00	60.00	37.00		58.00	36.00		65.00	
SYSTEM ANALYST	35.00	56.00	34.00	44.00	42.00	32.00	39.00	54.00	45.00
JR SYSTEM ANALYST	36.00							44.00	
SR PROGRAMMER	35.00	50.00	30.00	51.00		32.00	39.00		
PROGRAMMER	30.00	42.00	27.00			29.00	35.00	40.00	35.00
JR PROGRAMMER	25.00		24.00			22.00	22.00		
COMMUNICATIONS ANALYST	49.00	32.00		65.00	42.00				40.00
LEAD DOC SPECIALIST	35.00								
SR DOC SPECIALIST						22.00			
DOC SPECIALIST						20.00			30.00
DATA PREP SPECIALIST									
CLERK/TYPIST						12.00			
DATA ENTRY OPERATOR									
LEAD COMPUTER OPERATOR	20.00								
SR COMPUTER OPERATOR									
COMPUTER OPERATOR									

M-M Info- background

PROFESSIONAL SERVICES COMPETITORS
COMMERCIAL
1983

	08/81 Input	11/82 Keane	11/82 P.S.I	08/82 McAuto	05/82 Allen Serv.	02/82 Omega	11/82 Univac	04/82 Sys Hse	03/82 DASD	11/82 A.A.Co.	01/82 Ask Comp.	01/82 Wrldwide Computer
Sr DB Consultant												
Prin. Consultant	103.00	-	-	136.00	-	-	-	-	-	120.00	-	69.00
Sr. Consultant	80.00	67.00	-	115.00	-	-	-	-	36.00	90.00	-	56.00
FLD/ACT Manager	-	-	-	135.00	-	-	-	-	-	-	-	-
Project Manager	75.00	60.00	46.00	112.00	-	45.00	-	45.00	-	75.00	-	56.00
DB Consultant	-	-	42.00	107.00	-	-	-	38.00	-	-	-	-
Consultant	58.00	-	-	107.00	-	-	-	-	-	55.00	63.00	-
Specialist	-	-	-	100.0	45.00	-	-	36.00	-	-	-	-
Sr. Sys. Analyst	-	55.00	39.00	91.00	38.00	45.00	36.00	40.00	34.00	50.00	65.00	-
Systems Analyst	55.00	38.00	36.00	83.00	35.00	37.00	31.00	38.00	30.00	-	-	45.00
Jr. Sys. Analyst	-	-	-	70.00	-	-	26.00	-	25.00	-	-	41.00
Sr. Programmer	35.00	38.00	34.00	75.00	38.00	37.00	36.00	36.00	32.00	45.00	-	38.00
Programmer	25.00	-	27.00	63.00	35.00	35.00	31.00	34.00	26.00	30.00	40.00	33.00
Jr. Programmer	-	-	-	56.00	32.00	30.00	26.00	30.00	-	23.00	-	23.00
Communications Anal.	-	-	-	-	-	-	-	38.00	-	-	-	-
Lead Doc. Specialist	-	-	-	53.00	-	-	-	-	-	45.00	-	-
Sr. Doc Specialist	23.00	-	-	-	-	30.00	-	-	-	-	-	28.00
Doc Specialist	-	-	-	-	-	-	-	-	-	-	-	-
Data Prep Spec.	-	-	-	-	-	-	-	-	-	-	-	-
Clerk/Typist	-	-	-	-	-	-	-	-	-	-	-	-
Data Entry Oper.	-	-	-	-	-	-	-	-	-	-	-	-
Lead Comp. Oper.	-	-	-	-	-	-	-	-	-	-	-	-
Sr. Comp. Oper.	-	-	-	-	-	-	-	-	-	-	-	-
Computer Oper.	-	-	-	-	-	-	-	-	-	-	-	-

MM Info - Background

GOVERNMENT COMPETITORS -13

Computer Sciences Corporation
Electronic Data Systems
Burroughs (SDC)
Planning Research Corporation
Control Data Corporation
Boeing Computer Services
* McAuto
Informatics
* Shared Medical Systems
* Technicon
* Datacare
7 — * IBM PCS
Datacrown

* Government Medical Facilities

PROJECT WORK STATEMENT

TITLE PROFESSIONAL SERVICE PRICING PRACTICE

CLIENT Market Marietta Data Systems

CONTRACT: ATTACHED X TO FOLLOW _____ LETTER _____ VERBAL ____

PROJECT LEADER T O'Flaherty (100) PROJECT CODE YPSP SPRINT# ____

DATE STARTED 2-8-83 PLANNED COMPLETION DATE 4-8-83

LEVEL OF EFFORT(Professional Man Days) _____

TOTAL CONTRACT VALUE: $ or ₤ $12,500.00

REVENUE DISTRIBUTION (% or $) INPUT US 100% INPUT LTD _____

REIMBURSABLE EXPENSES: NO _____

YES X

EXP. BUDGET not fixed TO COVER: TRAV: X
TELE: X
RPT. PREP.: X
OTHER: _____

BILLING SCHEDULE DESCRIPTION billed as notifed

PROJECT DESCRIPTION To interview competitors to learn of current industry billing practices.

INDICATE TYPE OF WORK: REPORT X PRESENTATION X

THANK YOU PACKAGE: YES X NO _____

ACCOUNTING USE ONLY: ENTERED ON CURRENT PROJECT LIST _____
FIRST HALF BILLING COMPLETED _____
FINAL + EXP BILLING COMPELTED _____

DISTRIBUTION

CONTRACT FILE
LIBRARY FILE
NEW JERSEY
INPUT LTD.

TOF
Originator

TOF
Project Manager

JANET
SHEILA (Y's ONLY
JAN M.
BINDER COPY

2-14-83
Date Typed

INPUT

Page 1 of 2

Janet - Cost fund orig -
Tom

1983 QUARTERLY SCHEDULING PLAN (Q1)

PROJECT: YPSP

DATE: 2/28/83

PROJECT LEADER: TOF

ACTIVITY / PROJECT	NAME	MAN DAYS	EFFI-CIENCY	ESMD	CORP. WEEK END	CORPORATE/WEEK ENDING												
						JAN				FEB				MARCH				
						1 1/7	2 1/14	3 1/21	4 1/28	5 2/4	6 2/11	7 2/18	8(4) 2/25	9 3/4	10 3/11	11 3/18	12 3/25	13 4/1
70: PROJECT AUTHORIZATION/ SPECIFICATION																		
70: KICK-OFF MEETING		.5	1.0	.5							△							
70: CLIENT CONTROL																		
71: Q DESIGN		.5	1.0	.5							△							
71: Q APPROVAL/ REVIEW MEETING		.5	1.0	.5								△						
72: RESEARCH																		
73A: INTERVIEWS ON SITE ( ) NO.																		
74A: INTERVIEWS PHONE ( ) NO. 18		3.0 3.0	1.0 .5	3.0 1.5									△ 1.5	2.0	△ 1.0			
70: MIDWAY REVIEW MEETING																		

INPUT

R12/80

PROJECT WORK STATEMENT

TITLE PROFESSIONAL SERVICE PRICING PRACTICER

CLIENT Market Marietta Data Systems

CONTRACT: ATTACHED X TO FOLLOW _____ LETTER _____ VERBAL ____

PROJECT LEADER T O'Flaherty (100) PROJECT CODE YPSP SPRINT# ____

DATE STARTED 2-8-83 PLANNED COMPLETION DATE 4-8-83

LEVEL OF EFFORT(Professional Man Days) $9,500.00

TOTAL CONTRACT VALUE: $ or ~~£~~ $12,500.00

REVENUE DISTRIBUTION (% or $) INPUT US 100% INPUT LTD _____

REIMBURSABLE EXPENSES: NO _____

YES X

EXP. BUDGET not fixed TO COVER: TRAV: X
TELE: X
RPT. PREP.: X
OTHER: _____

BILLING SCHEDULE DESCRIPTION billed as notified

PROJECT DESCRIPTION To interview competitors to learn of current industry billing practicer.

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THANK YOU PACKAGE: YES X NO _____

ACCOUNTING USE ONLY: ENTERED ON CURRENT PROJECT LIST _____
FIRST HALF BILLING COMPLETED _____
FINAL + EXP BILLING COMPELTED _____

DISTRIBUTION

CONTRACT FILE
LIBRARY FILE
NEW JERSEY
INPUT LTD.

TOF
Originator

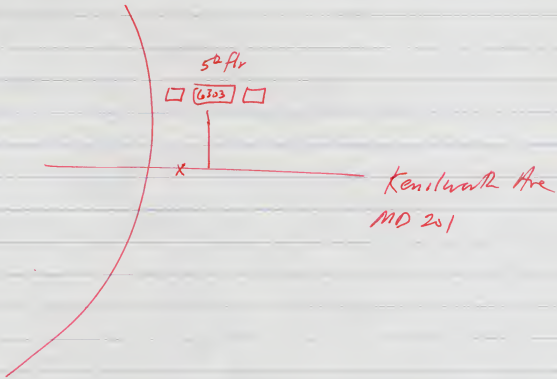
TOF
Project Manager

JANET
SHEILA (Y's ONLY
JAN M.
BINDER COPY

2-14-83
Date Typed

INPUT

10 am Don McCullough 301-982-6552



COMMERCIAL COMPETITORS - 18

Computer Sciences Corporation
* Arthur Anderson & Co., (SDM similar to Method 1)
? - * IBM
GEISCO (Lambda Technology)
Electronic Data Systems
Computer Task Group, Inc.
DASD Corporation
CGA Computer Associates
American Management Systems not so much
Burroughs (SDC)
Informatics
* COMSERV Corporation
* MSA (Arista)
* Hewlett-Packard
* ASK Computer, Inc.
Peat, Marwick and Mitchell
* Cullinane/Rath & Strong
Keane Associates - Phil NYC + Orlando
Spradellis

* Also for Manufacturing Systems

GOVERNMENT COMPETITORS -13

Computer Sciences Corporation
Electronic Data Systems
Burroughs (SDC)
Planning Research Corporation
Control Data Corporation
Boeing Computer Services
* McAuto
Informatics
* Shared Medical Systems
* Technicon
* Datacare
7 - * IBM PCS
Datacrown

* Government Medical Facilities

PROFESSIONAL SERVICES COMPETITORS

FEDERAL

12/14/82

- 1983 -

	11/82 CSC	EST83 DATA-CROWN	EST83 INFOR-MATICS	EST83 AMS	EST83 UNITED COMP	EST83 EDS FED'L	EST83 PRC	EST83 CDC	07/82 ON LINE SYSTEMS
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PROJECT MANAGER	45.00					43.00			90.00
DATA BASE CONSULTANT									
CONSULTANT	57.00						48.00		65.00
SPECIALIST	49.00	42.00					41.00		
SR SYSTEM ANALYST	45.00	60.00	37.00		58.00	36.00		65.00	
SYSTEM ANALYST	35.00	56.00	34.00	44.00	42.00	32.00	39.00	54.00	45.00
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SR PROGRAMMER	35.00	50.00	30.00	51.00		32.00	39.00		
PROGRAMMER	30.00	42.00	27.00			29.00	35.00	40.00	35.00
JR PROGRAMMER	25.00		24.00			22.00	22.00		
COMMUNICATIONS ANALYST	49.00	32.00		65.00	42.00				40.00
LEAD DOE SPECIALIST	35.00								
SR DOC SPECIALIST						22.00			
DOC SPECIALIST						20.00			30.00
DATA PREP SPECIALIST									
CLERK/TYPIST						12.00			
DATA ENTRY OPERATOR									
LEAD COMPUTER OPERATOR	20.00								
SR COMPUTER OPERATOR									
COMPUTER OPERATOR									

M-M Info - background

PROFESSIONAL SERVICES COMPETITORS
COMMERCIAL
1983

	08/81 Input	11/82 Keane	11/82 P.S.I	08/82 McAuto	05/82 Allen Serv.	02/82 Omega	11/82 Univac	04/82 Sys Hse	03/82 DASD	11/82 A.A.Co.	01/82 Ask Comp.	01/82 Wrldwide Computer
Sr DB Consultant												
Prin. Consultant	103.00	-	-	136.00	-	-	-	-	-	120.00	-	69.00
Sr. Consultant	80.00	67.00	-	115.00	-	-	-	-	36.00	90.00	-	56.00
FLD/ACT Manager	-	-	-	135.00	-	-	-	-	-	-	-	-
Project Manager	75.00	60.00	46.00	112.00	-	45.00	-	45.00	-	75.00	-	56.00
DB Consultant	-	-	42.00	107.00	-	-	-	38.00	-	-	-	-
Consultant	58.00	-	-	107.00	-	-	-	-	-	55.00	63.00	-
Specialist	-	-	-	100.0	45.00	-	-	36.00	-	-	-	-
Sr. Sys. Analyst	-	55.00	39.00	91.00	38.00	45.00	36.00	40.00	34.00	50.00	65.00	-
Systems Analyst	55.00	38.00	36.00	83.00	35.00	37.00	31.00	38.00	30.00	-	-	45.00
Jr. Sys. Analyst	-	-	-	70.00	-	-	26.00	-	25.00	-	-	41.00
Sr. Programmer	35.00	38.00	34.00	75.00	38.00	37.00	36.00	36.00	32.00	45.00	-	38.00
Programmer	25.00	-	27.00	63.00	35.00	35.00	31.00	34.00	26.00	30.00	40.00	33.00
Jr. Programmer	-	-	-	56.00	32.00	30.00	26.00	30.00	-	23.00	-	23.00
Communications Anal.	-	-	-	-	-	-	-	38.00	-	-	-	-
Lead Doc. Specialist	-	-	-	53.00	-	-	-	-	-	45.00	-	-
Sr. Doc Specialist	23.00	-	-	-	-	30.00	-	-	-	-	-	28.00
Doc Specialist	-	-	-	-	-	-	-	-	-	-	-	-
Data Prep Spec.	-	-	-	-	-	-	-	-	-	-	-	-
Clerk/Typist	-	-	-	-	-	-	-	-	-	-	-	-
Data Entry Oper.	-	-	-	-	-	-	-	-	-	-	-	-
Lead Comp. Oper.	-	-	-	-	-	-	-	-	-	-	-	-
Sr. Comp. Oper.	-	-	-	-	-	-	-	-	-	-	-	-
Computer Oper.	-	-	-	-	-	-	-	-	-	-	-	-

MM Info - Background

INPUT

PARK 80 PLAZA WEST-1, SADDLE BROOK, NEW JERSEY 07662 (201) 368-9471

January 20, 1983

Mr. Don McCullough
Martin-Marietta Data Systems
6801 Rockledge Drive
Bethesda, Maryland 20034

Dear Mr. McCullough:

This letter is a response to the telephone conversations that Mr. Tom O'Flaherty and I had with you last week concerning INPUT performing a custom study for Martin-Marietta Data Systems on professional service firms' pricing practices.

We are appreciative that you have looked to INPUT for this study and we believe that your confidence is well placed. In the last year, we have conducted a wide range of studies identifying business practices in the information service industry.

The remainder of this letter is divided into the following sections:

- o INPUT's Understanding
- o Scope
- o Methodology
- o Schedule and fee

INPUT's Understanding

Martin-Marietta Data Systems (MMDS) Professional Services Group wishes to obtain up-to-date and detailed information on pricing and associated business practices of its competitors.

MMDS requires this information on competitors who are factors in both the government market as well as the general commercial market (excluding single industry specialist firms such as SEI). MMDS is particularly interested in competitors who do considerable work on a project basis (e.g., T&M work with a project management component and fixed price jobs).

Scope

In the course of the study, the following issues will be addressed:

- o What are the 1982 & 1983 hourly rates, by major position categories?
  - Why are rates changing?

Follow on
Imp at price

- What are the expected trends?

o Are the same rates used for T&M jobs as for fixed price jobs?

o What are levels of effective discounts?

  - Under what conditions are they given?

  - How are they given (changing billed hours, changing assigned job categories, etc.)?

o How significant are variations from standard rates due to such factors as:

  - Type of industry

  - Region

  - Technical focus

  - Special expertise

o How do professional service firms see rates being affected by,

  - Advances in productivity techniques (either public or proprietary)

  - Turnover rates

  - Personnel shortages

Methodology

o INPUT will use its best efforts to interview 18 professional service firms, with equal priority given to those in the government and commercial sectors

  - INPUT will develop a questionnaire and review it with MMDS

  - The list of firms to be interviewed will be agreed to jointly by INPUT and MMDS

o Respondents will be offered a summary of the study as a incentive for taking part in the study.

- The data required by MMDS is sensitive information. This will have the following effects on this project:
  - More firms than average may be unwilling to participate; this may necessitate adding more firms to the target list.
  - Some firms may only participate if interviews are held on site; since on site interviews will add to time and expense, such firms will only be interviewed if necessary for the study's success. If this is required and will involve additional expense, MMDS approval will be required.
  - Only a small number of people in some firms may be authorized to release this type of data; this will add to the elapsed time needed to gain interviews.

Schedule & Fee

The schedule is as follows:

- Week 1: Design and review questionnaire
- Week 2-4: Interviews
- Week 5: Analysis and preparation of report
- Week 6: Presentation of results to MMDS
- Week 8: Delivery of final written report

The professional fee for this study is $12,500. Out-of-pocket expenses will be billed at cost. Any additional professional fee or out-of-pocket expense required to conduct on site interviews will be approved by MMDS in advance. If in the course of the study, it becomes apparent that it is not possible to obtain the quality and/or quantity of data for a satisfactory report, INPUT will recommend termination and only bill for time and expense incurred.

INPUT looks forward to working with MMDS on this project. If you have any questions, about this proposal please do not hesitate to call Tom O'Flaherty or myself.

Sincerely,

Edward I. Metz

Edward I. Metz
Senior Vice President

AUTHORIZED BY MMDS

Ed Donald McCullough
NAME

Product Director, Prof. Servs.
TITLE

February 8, 1983
DATE

ACCEPTED BY INPUT

[illegible]
NAME

Principal Consultant
TITLE

Feb 8, 1983
DATE

PROJECT WORK STATEMENT

TITLE Professional Services Pricing Practices

CLIENT Martin-Marietta Data Systems

CONTRACT: ATTACHED X TO FOLLOW ____ LETTER ____ VERBAL ____

PROJECT LEADER TCR CODE VPSP

DATE STARTED 2/8/83 PLANNED COMPLETION DATE 4/8/83

LEVEL OF EFFORT(Professional Man Days) $9,500

TOTAL CONTRACT VALUE: $ 12,500

REVENUE DISTRIBUTION (% or $) INPUT US 100 INPUT LTD ____

REIMBURSABLE EXPENSES: NO ____

YES ✓

EXP. BUDGET not fixed TO COVER: TRAV: ✓
TEL: ✓
RPT. PREP.: ✓
OTHER: ____

BILLING SCHEDULE DESCRIPTION Bill as notified

PROJECT DESCRIPTION To interview competitors to learn of current industry billing practices

INDICATE TYPE OF CUSTOM WORK: REPORT ✓ PRESENTATION ✓

THANK YOU PACKAGE: YES ✓ NO ____

Jeske

PH - Breakup:
Same rates - all kinds of contracts } See what happens after first few cut

~~5b - include # bus~~

Cost plus fixed fee

PSI

Cancel

WS

GW

1) To what extent does cost affect price?

2) Cost as % of price?

Put at end - Separate Q

3) What are relative perceived strengths of competitors? -

4) What methods are used to control fixed price contracts?

5) Competition Quality = top

Body Shop

PROJECT WORK STATEMENT

TITLE PROFESSIONAL SERVICE PRICING PRACTICE

CLIENT Market Marietta Data Systems

CONTRACT: ATTACHED X TO FOLLOW _____ LETTER _____ VERBAL ____

PROJECT LEADER T O'Flaherty (100) PROJECT CODE YPSP SPRINT# ____

DATE STARTED 2-8-83 PLANNED COMPLETION DATE 4-8-83

LEVEL OF EFFORT(Professional Man Days) _____

TOTAL CONTRACT VALUE: $ or £ $12,500.00

REVENUE DISTRIBUTION (% or $) INPUT US 100% INPUT LTD _____

REIMBURSABLE EXPENSES: NO _____

YES X

EXP. BUDGET not fixed TO COVER: TRAV: X
TELE: X
RPT. PREP.: X
OTHER: _____

BILLING SCHEDULE DESCRIPTION billed as notifed

PROJECT DESCRIPTION To interview competitors to learn of current industry billing practices.

INDICATE TYPE OF WORK: REPORT X PRESENTATION X

THANK YOU PACKAGE: YES X NO _____

ACCOUNTING USE ONLY: ENTERED ON CURRENT PROJECT LIST _____
FIRST HALF BILLING COMPLETED _____
FINAL + EXP BILLING COMPELTED _____

DISTRIBUTION

CONTRACT FILE
LIBRARY FILE
NEW JERSEY
INPUT LTD.

TOF
Originator

TOF
Project Manager

JANET
SHEILA (Y's ONLY)
JAN M.
BINDER COPY

2-14-83
Date Typed

Custom

INPUT

Orig

CONFIDENTIAL

INPUT QUESTIONNAIRE

CATALOG. NO Y P S P
SIC. CODE
SIZE CODE
AREA CODE
STUDY CODE
DATE MM DD YY

STUDY TITLE:
TYPE OF INTERVIEW: ☐ VENDOR ☐ USER ☐ TELEPHONE ☐ ON-SITE ☐ MAIL

INTERVIEWER: _____

COMPANY: _____ CO. TYPE: _____

ADDRESS: _____ SALES: _____

_____ # EMPL: _____

_____

_____

INDUSTRY ☐

☐ DISCRETE MANUFACTURING	☐ UTILITIES	☐ INSURANCE
☐ PROCESS MANUFACTURING	☐ RETAIL	☐ GOVERNMENT- FEDERAL
☐ TRANSPORTATION	☐ BANKING	☐ GOVERNMENT-STATE & LOCAL
☐ MEDICAL	☐ WHOLESALE	☐ EDUCATION
☐ SERVICES	☐ OTHER	

INTERVIEWS

NAME	TITLE	TELEPHONE NO.

SUMMARY

REFERENCES

CATALOG NO. YPSP☐☐

PROFESSIONAL SERVICES PRICING PRACTICES

INPUT is a research and consulting firm in Saddle Brook, NJ. We are conducting a study on professional service firms' pricing practices. In return for your taking part in our study, we will send you a summary of our report at no charge.

1. Is your professional service business nationwide or is most of your work conducted in particular geographic areas?

   ☐ Nationwide

   ☐ Particular areas - Which ones?

   _____

   _____

   _____

   _____

2. Is each of the following customer or product areas a primary or secondary priority for your professional services activities?

	Primary	Secondary
Commercial Accounts	_____	_____
Government Accounts	_____	_____
Federal ADP	_____	_____
Federal Embedded Computer (Weapons) Systems	_____	_____
State and Local	_____	_____
Manufacturing Applications	_____	_____
Banking and Finance Applications	_____	_____
Health Care Applications	_____	_____
Other (describe)	_____	_____

3a. What professional service firms do you see as your primary competition now? What do you see as their strengths?

_____

_____

_____

_____

3b. What other firms do you think might be added to that list in two or three years?

_____

_____

_____

4. Do you use the same billing rate for straight T&M engagements as for task-oriented engagements (even if billed for on a T&M basis)?

☐ Yes ☐ No

Why? _____

_____

_____

_____

IF NO, discuss differences: _____

_____

_____

_____

5a. When producing a fixed price proposal, do you use the same rate structure as used on T&M projects for project personnel?

☐ Yes ☐ No

IF NO, describes differences: _____

_____

_____

5b. Is a "surcharge" or "contingency factor" added to fixed price proposals over and above the result produced by your billing rate calculations (includes increasing number of hours)?

☐ Yes ☐ No

If YES, how much, on the average? _____

6. How important is each of the following factors in affecting changes in your billing rates (1 = low, 5 = high)? Why?

	Importance	Reason
General Inflation Rate		
Your Firm's Personnel Turnover		
Your Cost Structure		
Your Customers' Economic Conditions		
Personnel Shortages		
Your Competitors' Rates		
Proprietary Productivity Tools or Approaches		

7. If the average billing rates for your firm's management and technical staff equalled 100 in 1980, how would you see this index changing for your firm in each year up to 1984? Why?

Year	Index	Reason
1980	100	
1981		
1982		
1983		
1984		

8. Do you have formal variations (either higher or lower) from your standard rates related to:

	Yes	No
• Type of Customer (e.g., commercial vs. government)	_____	_____
• Application Type (e.g., manufacturing vs. general commercial)	_____	_____
• Competitive vs. Noncompetitive Situations	_____	_____
• Geographic Area	_____	_____
• Special Expertise	_____	_____
• Other (describe) _____	_____	_____

FOR ALL AREAS ANSWERED "YES," ASK:

- Why?
- Give some examples.
- How large is the variance?

COMPLETE ANSWERS ON ATTACHED SHEET.

8b. DESCRIPTION OF RATE VARIATION

Area	Reason	Examples	Size of Variance
Type of Customer (e.g., commercial vs. government)			
Application Type (e.g., manufacturing vs. general commercial)			
Competitive vs. Noncompetitive Situations			
Geographic Area			
Special Expertise			
Other (describe)			

CATALOG NO. YPSIPL[ ]

INPUT

Do you ever give discounts from your standard rates?

☐ Yes ☐ No

IF YES:

- Under what conditions? _____

_____

- How is this accomplished (e.g., reducing hourly rates, reducing billed hours, changing job categories, cost plus fixed fee)?

_____

_____

_____

- About how often does this occur?

_____

- About what percentage reduction from your standard rates is your typical discount? (May be one number or a range.)

_____

10. Could you provide me with your current (1983) rates per hour for the following categories? We have defined each title as including specific years of experience; if you do not use exactly the same definition, please provide the rate for the closest title and tell me what your definition is.

Title	Years Experience *	Title Variance	1983 Rate ($ per hour)
Account/Field Manager	9 - 12		
Project Leader	7 - 10		
Principal Consultant (in a specialized area)	10 - 15		
Senior Consultant (in a specialized area)	9 - 12		
Consultant (in a specialized area)	8 - 10		
Principal System Designer	7 - 10		
Senior Systems Analyst	5 - 7		
Systems Analyst	2 - 5		
Junior Systems Analyst	0 - 2		
Senior Programmer	5 - 7		
Programmer	2 - 5		
Junior Programmer	0 - 2		

* Not including education.

11. Do you furnish a schedule of professional service rates to prospective clients?

☐ Yes ☐ No

IF YES: Would you send INPUT a copy?

☐ Yes ☐ No

Please make changes indicated

Match type style as close as possible & cut & paste (copy attached)

PROFESSIONAL SERVICES PRICING PRACTICES

INPUT is a research and consulting firm in Saddle Brook, NJ. We are conducting a study on professional service firms' pricing practices. In return for your taking part in our study, we will send you a summary of our report at no charge.

1. Is your professional service business nationwide or is most of your work conducted in particular geographic areas?

   ☐ Nationwide

   ☐ Particular areas - Which ones?

   _____

   _____

   _____

   _____

2. Is each of the following customer or product areas a primary or secondary priority for your professional services activities?

	Primary	Secondary
Commercial Accounts	_____	_____
Government Accounts	_____	_____
Federal ADP	_____	_____
Federal Embedded Computer (Weapons) Systems	_____	_____
State and Local	_____	_____
Manufacturing Applications	_____	_____
Banking and Finance Applications	_____	_____
Health Care Applications	_____	_____
Other (describe)	_____	_____

3a. What professional service firms do you see as your primary competition now? What do you see as their strengths?

_____

_____

_____

_____

3b. What other firms do you think might be added to that list in two or three years?

_____

_____

_____

4. Do you use the same billing rate for straight T&M engagements as for task-oriented engagements (even if billed for on a T&M basis)?

☐ Yes ☐ No

Why? _____

_____

_____

_____

IF NO, discuss differences: _____

_____

_____

_____

5a. When producing a fixed price proposal, do you use the same rate structure as used on T&M projects for project personnel?

☐ Yes ☐ No

IF NO, describes differences: _____

_____

_____

5b. Is a "surcharge" or "contingency factor" added to fixed price proposals over and above the result produced by your billing rate calculations?

☐ Yes ☐ No (Includes increasing number of hours)

IF YES, how much, on the average? _____

6. How important is each of the following factors in affecting changes in your billing rates (1 = low, 5 = high)? Why?

	Importance	Reason
General Inflation Rate		
Your Firm's Personnel Turnover		
Your Customers' Economic Conditions		
Personnel Shortages		
Your Competitors' Rates		
Your cost structure		
Proprietary Productivity Tools or Approaches		

7. If the average billing rates for your firm's management and technical staff equalled 100 in 1980, how would you see this index changing for your firm in each year up to 1984? Why?

Year	Index	Reason
1980	100	
1981		
1982		
1983		
1984		

8. Do you have formal variations (either higher or lower) from your standard rates related to:

	Yes	No
• Type of Customer (e.g., commercial vs. government)	_____	_____
• Application Type (e.g., manufacturing vs. general commercial)	_____	_____
• Competitive vs. Noncompetitive Situations	_____	_____
• Geographic Area	_____	_____
• Special Expertise	_____	_____
• Other (describe) _____	_____	_____

FOR ALL AREAS ANSWERED "YES," ASK:

- Why?
- Give some examples.
- How large is the variance?

COMPLETE ANSWERS ON ATTACHED SHEET.

8b. DESCRIPTION OF RATE VARIATION

Area	Reason	Examples	Size of Variance
Type of Customer (e.g., commercial vs. government)			
Application Type (e.g., manufacturing vs. general commercial)			
Competitive vs. Noncompetitive Situations			
Geographic Area			
Special Expertise			
Other (describe)			

CATALOG NO. YIPSIP[ ][ ]

INPUT

9. Do you ever give discounts from your standard rates?

☐ Yes ☐ No

IF YES:

- Under what conditions? _____

_____

- How is this accomplished (e.g., reducing hourly rates, reducing billed hours, changing job categories)? Cost plus fixed fee

_____

_____

_____

- About how often does this occur?

_____

- About what percentage reduction from your standard rates is your typical discount? (May be one number or a range.)

_____

10. Could you provide me with your current (1983) rates per hour for the following categories? We have defined each title as including specific years of experience; if you do not use exactly the same definition, please provide the rate for the closest title and tell me what your definition is.

Title	Years Experience*	Title Variance	1983 Rate ($ per hour)
Field Account Manager	9 - 12		
Project Leader	7 - 10		
Principal Consultant (in a specialized area)	10 - 15		
Senior Consultant (in a specialized area)	9 - 12		
Consultant (in a specialized area)	8 - 10		
Principal System Designer	7 - 10		
Senior Systems Analyst	5 - 7		
Systems Analyst	2 - 5		
Junior Systems Analyst	0 - 2		
Senior Programmer	5 - 7		
Programmer	2 - 5		
Junior Programmer	0 - 2		

* Not including education

11. Do you furnish a schedule of professional service rates to prospective clients?

☐ Yes ☐ No

IF YES: Would you send INPUT a copy?

☐ Yes ☐ No

TO: Laura Tutino

FROM: T. O'Flaherty

This will confirm our agreement that you will perform 10 interviews for YPS9 and be able to charge 5 days for this work, regardless of actual time taken.

My targets are 3 interviews this week and the remaining 7 by the end of next week, i.e., 5/17.

cc: D. Fostle

CONFIDENTIAL

D

INPUT QUESTIONNAIRE

CATALOG. NO. Y S P 9 0 0 1
SIC. CODE
SIZE CODE
AREA CODE
STUDY CODE
DATES 0 5 0 6 8 5
MM DD YY

STUDY TITLE:
TYPE OF INTERVIEW: ☐ VENDOR ☐ USER ☐ TELEPHONE ☐ ON-SITE ☐ MAIL

INTERVIEWER: Laura Tutino

COMPANY: McAuto

CO. TYPE:

ADDRESS: 325 McDonnell Blvd.
Hazelwood, MO 63042

SALES:

NO. EMPL:

INDUSTRY ☐

☐ DISCRETE MANUFACTURING
☐ PROCESS MANUFACTURING
☐ TRANSPORTATION
☐ MEDICAL
☐ SERVICES
☐ UTILITIES
☐ RETAIL
☐ BANKING
☐ WHOLESALE
☐ OTHER
☐ INSURANCE
☐ GOVERNMENT - FEDERAL
☐ GOVERNMENT - STATE & LOCAL
☐ EDUCATION

INTERVIEWS

NAME	TITLE	TELEPHONE NO.
Bill Crowell	Mgr. Product Planning & Marketing (Mfg. Svcs)	314-233-3529

SUMMARY

REFERENCES

CATALOG NO. YPS9[ ][ ][ ]

PROFESSIONAL SERVICES PRICING PRACTICES: 1985

INPUT is a research and consulting firm in Saddle Brook, NJ. We are conducting a study on professional service firms' pricing practices. In return for your taking part in our study, we will send you a summary of both our new and old reports at no charge.

1. Is your professional service business nationwide or is most of your work conducted in particular geographic areas?

   (✓) Nationwide

   ( ) Particular areas - Which ones?

   _____

   _____

   _____

   _____

2. Is each of the following customer or product areas a primary or secondary priority for your professional service activities?

	PRIMARY	SECONDARY
Commercial Accounts	✓	
Government Accounts		✓
Federal ADP		✓
Federal Embedded Computer (Weapons) Systems		✓
State and Local	✓	
Manufacturing Applications*	✓*	*
Banking and Finance Applications	✓	
Health Care Applications	✓	
Other (describe)		

* If primary or secondary manufacturing applications not checked, terminate interview.

Please note: respondent stresses that development is from scratch & there is no real area of specialization.

INPUT

3. If the average billing rates for your firm's management and technical staff equalled 100 in 1980, how would you see this index changing for your firm in each year up to 1985? Did you change your rates each year?

YEAR	INDEX	RATES CHANGES (CHECK)
1980	100	
1981		7.5% increase every year. Cost drives
1982		
1983		
1984		
1985		

4. Could you provide me with your current (1985) rates per hour for the following categories? We have defined each title as including specific years of experience; if you do not use exactly the same definition, please provide the rate for the closest title and tell me what your definition is. What were these titles' rates in 1980 and 1983 (if dollars not available, give % of current rate).

TITLE	YEARS*	TITLE VARIANCE	1985 RATE ($ PER HOUR)	1980 RATE	1983 RATE
Account/ Field Manager	10-5	Senior or Principal	140-155	105	120
Person whom Account/Field Manager Reports to (give typical title	15+				
Project Leader	7-10				
Principal Consultant (in a technical area)	10-15				
Senior Consultant (in a technical area)	9-10	V	140	100	114

147.5

$(107.5 / 1.40)$

$107.5 = 1.23$

Note - Managers do not have billing rates

TITLE	YEARS*	TITLE VARIANCE	1985 RATE ($ PER HOUR)	1980 RATE	1983 RATE
Consultant (in a technical area)	8-10	—	120	86	98
System Designer	7-10	Sr. Product Analyst	90	64	73
Senior Systems Analyst	5-7	—	85	61	69
Systems Analyst	2-5	—	80	57	65
Senior Programmer	5-7	Analyst	85	61	69
Programmer	2-5	Programmer	75	54	61

*Not including education.

5. Do you have formal variations (either higher or lower) from your standard rates related to:

	YES	NO	
• Application Type (e.g., manufacturing vs general commercial).	____	✓	*
• Geographic Area	____	✓	
• Special Expertise	____	✓	
• Other (describe) _____	____	____	

FOR ALL AREAS ANSWERED "YES," ASK:

- Why?
- Give some examples.
- How large is the variance?

* This is all large scale development based on a "deal" (more or less volume discount)

5b. DESCRIPTION OF RATE VARIATION

AREA	REASON	EXAMPLES	SIZE OF VARIANCE
Application Type (e.g., manufacturing vs.general commercial			
Geographic Area			
Special Expertise			
Other Describe			

6. Do you ever give discounts from your standard rates?

(✓) YES ( ) NO

IF YES:

- Under what conditions? Usually a volume discount when involved in a long project (2-3 years) starting with 2-3 people, peaking to 10-12 people + dwindling back down to 2-3 people

- How is this accomplished (e.g., reducing hourly rates, reducing billed hours, changing job categories, cost plus fixed fee)? Reduce hourly rate based on overall deal (volume)

- About how often does this occur? 35% of the time

- About what percentage reduction from your standard rates is your typical discount? (May be one number or a range.) There is no typical discount

7. When producing a fixed price proposal, do you use the same rate structure as used on T&M projects for project personnel?

( ) YES ( ) NO

IF NO, describe differences: no fixed price (usually) but if fixed price the same rate is used + management reserve is added.

7b. Is a "surcharge" or "contingency factor" added to fixed price proposals over and above the result produced by your billing rate calculations (includes measuring number of hours)?

(✓) YES ( ) NO

IF YES, how much, on the average? management reserve - no average because we understand the problem first which eliminates need for a surcharge

7c. Sometimes you may perform task-oriented engagements, even though they are billed on a T&M basis. Do you use the same billing rate as for straight T&M work?

(✓) YES ( ) NO

Why? Only way to do it.

If NO, discuss differences: _____

8. Do you furnish a schedule of professional service rates to prospective clients?

(✓) YES ( ) NO standard schedule

IF YES: Would you send INPUT a copy?

( ) YES ( ) NO

will check with proper person

CONFIDENTIAL

(E)

INPUT QUESTIONNAIRE

CATALOG. NO. YP5700Z
SIC. CODE
SIZE CODE
AREA CODE
STUDY CODE
DATES 0 5 0 8 8 5 (MM DD YY)

STUDY TITLE:
TYPE OF INTERVIEW: ☒ VENDOR ☐ USER ☐ TELEPHONE ☐ ON-SITE ☒ MAIL

INTERVIEWER: Laura Tatino

Total CDC Computer Products and Services

COMPANY: CDC

CO. TYPE:

ADDRESS: 8100 34th Ave. South
Minneapolis, MN 55440

SALES: #5B

NO. EMPL: 50,000

INDUSTRY ☐
- ☑ DISCRETE MANUFACTURING
- ☐ PROCESS MANUFACTURING
- ☐ TRANSPORTATION
- ☐ MEDICAL
- ☑ SERVICES
- ☐ UTILITIES
- ☐ RETAIL
- ☐ BANKING
- ☐ WHOLESALE
- ☐ OTHER
- ☐ INSURANCE
- ☐ GOVERNMENT - FEDERAL
- ☐ GOVERNMENT - STATE & LOCAL
- ☐ EDUCATION

INTERVIEWS

NAME	TITLE	TELEPHONE NO.
ARI SCHATTAGER	Strat. Planner	(612) 853-5881

SUMMARY

REFERENCES

Professional Services
#60M, 1,500 employees

CATALOG NO. YPS9

PROFESSIONAL SERVICES PRICING PRACTICES: 1985

INPUT is a research and consulting firm in Saddle Brook, NJ. We are conducting a study on professional service firms' pricing practices. In return for your taking part in our study, we will send you a summary of both our new and old reports at no charge.

1. Is your professional service business nationwide or is most of your work conducted in particular geographic areas?

   (X) Nationwide

   ( ) Particular areas - Which ones?

   Bay Area, Chicago, Houston, N.Y., Washington, Mpls., Detroit, L.A. Denver, Dallas

2. Is each of the following customer or product areas a primary or secondary priority for your professional service activities?

	PRIMARY	SECONDARY
Commercial Accounts	✓	
Government Accounts	✓	
Federal ADP	✓	
Federal Embedded Computer (Weapons) Systems	✓	
State and Local		✓
Manufacturing Applications*	✓ *	*
Banking and Finance Applications		✓
Health Care Applications	✓	
Other (describe)		

* If primary or secondary manufacturing applications not checked, terminate interview.

3. If the average billing rates for your firm's management and technical staff equalled 100 in 1980, how would you see this index changing for your firm in each year up to 1985? Did you change your rates each year?

YEAR	INDEX	RATES CHANGES (CHECK)
1980	100	
1981	107	
1982	114	
1983	121	
1984	125	
1985	125	

4. Could you provide me with your current (1985) rates per hour for the following categories? We have defined each title as including specific years of experience; if you do not use exactly the same definition, please provide the rate for the closest title and tell me what your definition is. What were these titles' rates in 1980 and 1983 (if dollars not available, give % of current rate).

TITLE	YEARS*	TITLE VARIANCE	1985 RATE ($ PER HOUR)	1980 RATE	1983 RATE
Account/ Field Manager	10-5		100.-		
Person whom Account/Field Manager Reports to (give typical title	15+		131.-		
Project Leader	7-10		78.-		
Principal Consultant (in a technical area)	10-15		125.-		
Senior Consultant (in a technical area)	9-10		110.-		

INPUT

TITLE	YEARS*	TITLE VARIANCE	1985 RATE ($ PER HOUR) *	1980 RATE	1983 RATE
Consultant (in a technical area)	8-10		131.-		
System Designer	7-10		100.-		
Senior Systems Analyst	5-7		88.-		
Systems Analyst	2-5		68.-		
Senior Programmer	5-7		78.-		
Programmer	2-5		58.-		

*Not including education.

* Represents lower & volume 1-150 hrs

Discounted up to 15% for volume

5. Do you have formal variations (either higher or lower) from your standard rates related to:

	YES	NO
• Application Type (e.g., manufacturing vs general commercial).	____	✓
• Geographic Area	____	✓
• Special Expertise	____	✓
• Other (describe) _____	____	✓

FOR ALL AREAS ANSWERED "YES," ASK:

- Why?
- Give some examples.
- How large is the variance?

5b. DESCRIPTION OF RATE VARIATION

AREA	REASON	EXAMPLES	SIZE OF VARIANCE
Application Type (e.g., manufacturing vs.general commercial			
Geographic Area			
Special Expertise			
Other Describe			

6. Do you ever give discounts from your standard rates?

(✓) YES ( ) NO

Up to 15% for Volume

IF YES:

- Under what conditions? Highest Volume
  G.S. Com't pertains to
  1000 - 2000 hrs.

- How is this accomplished (e.g., reducing hourly rates, reducing billed hours, changing job categories, cost plus fixed fee)? _____

- About how often does this occur? _____

- About what percentage reduction from your standard rates is your typical discount? (May be one number or a range.) _____
  (See above info)

7. When producing a fixed price proposal, do you use the same rate structure as used on T&M projects for project personnel?

( ) YES (✓) NO

IF NO, describe differences: Cost based - up plus safety margin

7b. Is a "surcharge" or "contingency factor" added to fixed price proposals over and above the result produced by your billing rate calculations (includes measuring number of hours)?

(✓) YES ( ) NO

IF YES, how much, on the average? 10%

7c. Sometimes you may perform task-oriented engagements, even though they are billed on a T&M basis. Do you use the same billing rate as for straight T&M work?

( ) YES (✓) NO

Why? _____

_____

_____

If NO, discuss differences: Consulting Products are pre-defined tasks. Pricing is based on cost and value to customer

8. Do you furnish a schedule of professional service rates to prospective clients?

(✓) YES ( ) NO — but only excerpts

IF YES: Would you send INPUT a copy?

( ) YES (✓) NO

ATTACHMENT

PROFESSIONAL CLASSIFICATIONS

Account or Field Manager - Senior level manager who monitors performance against the scope of work, and contract schedules and plans. The project leader reports directly to this individual. Field managers provide the principal interface with the customer on contract performance and staffing. (10-15 years experience)

Project Leader - Plans, monitors and directs the efforts under a contract. Responsible for all on-site efforts, as well as customizing and off-site efforts. (7-10 years experience)

Principal Consultant - Top level consultant within a function (software, applications, operations, data base, communications, etc.) who is capable of advising senior management within the technical or functional organizations. (20-15 years experience)

Senior Consultant - Senior level individual who advises on specialized systems functions. (9-12 years experience)

Consultant - Individual who works directly with line and data processing organizations and uses specialized knowledge to develop methods and procedures for systems installation and implementation. (8-10 years experience)

System Designer - Individual who translates the functional design into the computer system design. (7-10 years experience)

CONFIDENTIAL

INPUT QUESTIONNAIRE

CATALOG. NO.
SIC. CODE
SIZE CODE
AREA CODE
STUDY CODE
DATES
MM DD YY

STUDY TITLE:
TYPE OF INTERVIEW: ☐ VENDOR ☐ USER ☐ TELEPHONE ☐ ON-SITE ☒ MAIL

INTERVIEWER: Laura Tortorice

COMPANY: Real Warwick Mitchell CO. TYPE:

ADDRESS: 303 East Wacker Drive SALES:

Chicago, IL 60601 NO. EMPL:

INDUSTRY ☐

☐ DISCRETE MANUFACTURING	☐ UTILITIES	☐ INSURANCE
☐ PROCESS MANUFACTURING	☐ RETAIL	☐ GOVERNMENT - FEDERAL
☐ TRANSPORTATION	☐ BANKING	☐ GOVERNMENT - STATE & LOCAL
☐ MEDICAL	☐ WHOLESALE	☐ EDUCATION
☐ SERVICES	☐ OTHER	

INTERVIEWS

NAME	TITLE	TELEPHONE NO.
Michael Rolfe	Principal	

SUMMARY

REFERENCES

CATALOG NO. [redacted]
Mail

PROFESSIONAL SERVICES PRICING PRACTICES: 1985

INPUT is a research and consulting firm in Saddle Brook, NJ. We are conducting a study on professional service firms' pricing practices. In return for your taking part in our study, we will send you a summary of both our new and old reports at no charge.

1. Is your professional service business nationwide or is most of your work conducted in particular geographic areas?

   ( ) Nationwide

   (X) Particular areas - Which ones?

   Midwest

2. Is each of the following customer or product areas a primary or secondary priority for your professional service activities?

	PRIMARY	SECONDARY
Commercial Accounts		
Government Accounts		
Federal ADP		
Federal Embedded Computer (Weapons) Systems		
State and Local		
Manufacturing Applications		
Banking and Finance Applications		
Health Care Applications		
Other (describe)		

3. If the average billing rates for your firm's management and technical staff equalled 100 in 1980, how would you see this index changing for your firm in each year up to 1985? Did you change your rates each year?

YEAR	INDEX	RATES CHANGES (CHECK)
1980	100	
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1983	130	
1984	140	
1985	150	

4. Could you provide me with your current (1985) rates per hour for the following categories? We have defined each title as including specific years of experience; if you do not use exactly the same definition, please provide the rate for the closest title and tell me what your definition is. What were these titles' rates in 1980 and 1983 (if dollars not available, give % of current rate).

TITLE	YEARS*	TITLE VARIANCE	1985 RATE ($ PER HOUR)	1980 RATE	1983 RATE
Account/ Field Manager	10-5				
Person whom Account/Field Manager Reports to (give typical title	15+				
Project Leader	7-10				
Principal Consultant (in a technical area)	10-15				
Senior Consultant (in a technical area)	9-10				

TITLE	YEARS*	TITLE VARIANCE	1985 RATE ($ PER HOUR)	1980 RATE	1983 RATE
Consultant (in a technical area)	8-10				
System Designer	7-10				
Senior Systems Analyst	5-7				
Systems Analyst	2-5				
Senior Programmer	5-7				
Programmer	2-5				

*Not including education.

5. Do you have formal variations (either higher or lower) from your standard rates related to:

	YES	NO
• Application Type (e.g., manufacturing vs general commercial).	↘ ____	____
• Geographic Area	↘ ____	____
• Special Expertise	↘ ____	____
• Other (describe) ____	____	____

FOR ALL AREAS ANSWERED "YES," ASK:

- Why? - Market Dictated
- Give some examples. Functional expertise in TP consulting is more in demand
- How large is the variance? -20%

5b. DESCRIPTION OF RATE VARIATION

AREA	REASON	EXAMPLES	SIZE OF VARIANCE
Application Type (e.g., manufacturing vs.general commercial	_____	_____	10%
Geographic Area	_____	_____	10%
Special Expertise	_____	_____	20%
Other Describe	_____		
	_____		
	_____		

6. Do you ever give discounts from your standard rates?

(X) YES ( ) NO

IF YES:

- Under what conditions? Competitive

- How is this accomplished (e.g., reducing hourly rates, reducing billed hours, changing job categories, cost plus fixed fee)? Reduced rate per hour

- About how often does this occur? 10% of time

- About what percentage reduction from your standard rates is your typical discount? (May be one number or a range.) 10%

7. When producing a fixed price proposal, do you use the same rate structure as used on T&M projects for project personnel?

( ) YES ( ) NO it depends

IF NO, describe differences: Differences in = duration of the between of the assignment

7b. Is a "surcharge" or "contingency factor" added to fixed price proposals over and above the result produced by your billing rate calculations (includes measuring number of hours)?

(X) YES ( ) NO

IF YES, how much, on the average? 10%

7c. Sometimes you may perform task-oriented engagements, even though they are billed on a T&M basis. Do you use the same billing rate as for straight T&M work?

(X) YES ( ) NO

Why? _____

_____

_____

If NO, discuss differences: _____

_____

_____

8. Do you furnish a schedule of professional service rates to prospective clients?

( ) YES (X) NO

IF YES: Would you send INPUT a copy?

( ) YES (X) NO

ATTACHMENT

PROFESSIONAL CLASSIFICATIONS

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System Designer - Individual who translates the functional design into the computer system design. (7-10 years experience)

Mr Robert Nolan
Martin Marietta
6305 Ivy Lane
Greenbelt, MD 20770

Dear Bob:

Attached is a draft of the "Thank you" package we propose sending to respondents to the survey (for your review). It parallels the one we sent to respondents to the 1983 survey.

Sincerely

TJR

December 20, 1983

Dear Study Participant:

Recently you were kind enough to participate in a study that INPUT conducted on Professional Services Policy.

We at INPUT are very appreciative for the time you spent with us and the useful information you supplied.

In return for your participation I am enclosing a summary of the results which I believe will be useful and interesting to you.

If you have any questions or comments, do not hesitate to contact me. Once again, thank you for taking part in our research.

Sincerely,

Tom O'Flaherty

Thomas O'Flaherty
Principal Consultant

TO/lcg
Enclosure

MANAGEMENT SUMMARY

I. Competition

- The respondents generally see themselves as having many competitors. These competitors are varied, including professional service firms, processing firms, accounting firms and, increasingly, hardware companies.

II. Pricing and Factors Affecting Pricing

- The average 1980 rate per hour ranges from $167 for a principal/partner to $97 for a junior programmer (Exhibit 1).

- Exhibit 2 shows the expected billing rate increase, from 1981 to 1985, using 1980 as the base year.
  - Note how the percent change closely mirrors the inflation rate.

- Competition and costs were seen as the most important factors affecting pricing and inflation and turnover the least important (Exhibit 3).
  - Note, however, that cost/inflation and personnel shortage/turnover are each closely related.

III. Pricing Practices

- The amount of competition and the related factors of expertise and custom type are the most common conditions affecting variations from standard rates.

- Discounts are common, typically for large jobs or in competitive situations.
  - The ~~an~~ proportion of jobs affected varies widely (from 10-80?)
  - Discounts typically fall into the 15-25% range
- Billing practices are essentially the same for task-oriented as for time and materials work.

- Where companies use the same rate structure for fixed price work, they often ~~generally~~ add a surcharge, but this varies considerably.

EXHIBIT 1

1985 RATES (AVERAGE)

TITLE	Average RATE 167	Range 131-220
Principal/Partner ACCOUNT MANAGER	~~$189~~ 151	100-175
PROJECT LEADER	~~79~~ 140	78-155
PRINCIPAL CONSULTANT	~~87~~ 154	140-175
SENIOR CONSULTANT	~~91~~ 145	125-160
CONSULTANT	~~76~~ 128	120-150
Systems ~~PRINCIPAL~~ DESIGNER	~~69~~ 120	90-140
SR. SYSTEMS ANALYST	~~60~~ 97	85-125
SYSTEMS ANALYST	50	
JR. SYSTEMS ANALYST	45	
SR. PROGRAMMER	47	
PROGRAMMER	41	
JR. PROGRAMMER	39	

INPUT

EXHIBIT 2

BILLING RATE INCREASES
(AVERAGE)

YEAR	INDEX	PERCENT CHANGE
1980	100	-
1981	~~109~~ 110	10%
1982	~~118~~ 119	8.2 %
1983	~~123~~ 127	6.7 %
1984	~~130~~ 132	3.9 %
1985	137	3.8

INPUT

INTERIM REPORT ON PROFESSIONAL SERVICES PRICING

- So far there are results available from 6 professional service firms (Exhibit 1).
  - One respondent's data is from the 1983 set of interview, pending a 1985 update; the others all represent interviews conducted in the last two weeks.
  - Three of the CPA firms information is specifically from their Houston office; these targets were requested by Martin Marietta.
- Exhibit 2 provides an overview of hourly rates.
  - The median average is the point at which there were as many observations above as below the number shown. The arithmetic mean average produced similar results; however, the median is generally more desirable in that it reduces the impact of extreme cases.
  - The range of highest and lowest rates shows that there is great diversity in billing practices in the industry.
  - In some cases, respondents did not have access to pre-1985 rates and/or increases were determined by an across-the-board percent increase. Where this was the case, we used this percentage information to derive the rates for earlier periods. If this was done, data was rounded to the nearest $5 to avoid "false precision".
  - The "translation table" used for titles is shown in Exhibit 9; this table was previously reviewed with Martin Marietta staff.
- Exhibit 3 contains the detail for each respondent and is the basis for Exhibit 2.
- Exhibit 4 calculates the average price increases for professional services, both on an index basis and well as on a year-to-year percentage increase. The year-to-year increases track quite closely to changes in the overall inflation rate.
- Exhibit 5 shows selected financial data on oil company performance for the years in question. Some items to note are:

- "Seven sisters" profits fell badly.

- The international integrated companies, at their worst, had margins half that of their domestic counterparts.

- Shell's own ROE sank badly from 1980 to 1983.

- Exhibit 6 on professional service firm performance had previously been supplied. As requested, I have put together material (Exhibit 7 & 8) describing the methodology employed to produce the data in Exhibit 6.

EXHIBIT 1: COMPANIES INCLUDED IN THE TABULATIONS

- Arthur Andersen
- Arthur Young
- Price Waterhouse
- Coopers & Lybrand
- McAuto (Professional Services Division)
- CDC (Professional Services Group)

NOTE: THREE OF THE BIG 8 INTERVIEWS WERE WITH THE HOUSTON OFFICE

EXHIBIT 4: BILLING RAGE CHANGES SINCE 1980 (1980=100)

	INDEX	YEAR-TO-YEAR INCREASE
1980	100	-
1981	110	10%
1982	119	8.2%
1983	127	6.7%
1984	132	3.9%
1985	137	3.8%

SOURCE: AVERAGE RATES OF INCREASES FROM RESPONDING VENDORS

EXHIBIT 5: SELECTED OIL COMPANY STATISTICS 1979-1983

	1979	1980	1981	1982	1983
"SEVEN SISTERS" (SHELL EXXON, MOBIL BP, TEXACO, SOCAL, GULF)					
REVENUES ($ BILL)	$340	$425	$450	$420	-
GROSS PROFIT ($ BILL)	$ 15	$ 23	$ 19	$13.5	-
PROFIT MARGIN					
DOMESTIC INTEGRATED	21.9%	20.9%	19.7%	20.0%	21.0%
INTERNATIONAL INTEGRATED (INCLUDES SHELL)	16.2%	12.7%	10.6%	10.3%	13.1%
SHELL					
GROSS REVENUES ($ BILL)	$14.5	$19.8	$21.7	$20.2	$19.9
NET REVENUES ($ BILL)	$ 1.1	$ 1.5	$ 1.7	$ 1.6	$ 1.6
RETURN ON EQUITY	16.1%	19.0%	18.4%	15.6%	14.4%

"SEVEN SISTER" DATA: THE ECONOMIST. OTHER DATA: S & P COMPANY AND INDUSTRY REPORTS, SHELL ANNUAL REPORTS.

EXHIBIT 6

PROFESSIONAL SERVICES COMPANY DATA

	ALL COMPANIES				
YEAR	NUMBER OF COMPANIES*	SALES ($BILL)*	YEAR TO YEAR SALES GROWTH*	PUBLIC COMPANY PROFITS GROSS*	(%) NET**
1979	909	$2.9	26%	7.3%	N/A
1980	975	$3.7	27%	8.6%	N/A
1981	1,284	$4.5	21%	7.1%	2.6%
1982	1,348	$5.3	17%	N/A	3.3%
1983	1,400	$6.4	21%	N/A	3.6%
1984	N/A	$7.9**	24%**	N/A	3.9%

SOURCES: * = ADAPSO ANNUAL REPORTS 1980-1984

** = INPUT VENDOR FINANCIAL WATCH

EXHIBIT 6

PROFESSIONAL SERVICES COMPANY DATA

	ALL COMPANIES				
YEAR	NUMBER OF COMPANIES*	SALES ($BILL)*	YEAR TO YEAR SALES GROWTH*	PUBLIC COMPANY (%) PROFITS GROSS*	NET**
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1980	975	$3.7	27%	8.6%	N/A
1981	1,284	$4.5	21%	7.1%	2.6%
1982	1,348	$5.3	17%	N/A	3.3%
1983	1,400	$6.4	21%	N/A	3.6%
1984	N/A	$7.9**	24%**	N/A	3.9%

SOURCES: * = ADAPSO ANNUAL REPORTS 1980-1984

** = INPUT VENDOR FINANCIAL WATCH

EXHIBIT 7:

METHODOLOGY USED IN 1984 ADAPSO REPORT

- The following is an excerpt from the report itself.

- As noted, the methodology is substantially unchanged from prior years.

EXHIBIT 9

TITLE TRANSLATION

INTERVIEW TITLE	INTERNAL TITLES-PER "PROFESSIONAL CLASSIFICATIONS"	SADAF TITLE(S) - TO BE USED IN REPORT
Superior to Account/ Field Manager	Director	Project Manager, SADAF Project Manger
Account/Field Manager	Field Manager	Systems Analyst I
Project Leader	Project Manager	Computer Systems Analyst
Principal Consultant	Principal Consultant	Data Base Consultant
Senior Consultant	Senior Data Base Consultant, Senior Consultant	Data Base Administrator, Software Consultant
Consultant	Consultant	Software Technician, Systems Analyst II
Systems Designer	Computer Systems Designer	Applications Programmer I
Senior Systems Analyst	Senior Consultant	Applications Programmer II

I INTRODUCTION

- This 18th annual report on the computer software and services industry has been prepared by INPUT under a commission from the Association of Data Processing Service Organizations (ADAPSO). It is designed for use by industry managers and financial analysts who wish to gain a fuller understanding of the size, growth, and trends of this important and rapidly changing industry.

  - ADAPSO consists of over 700 member companies and represents the interests of the computer software and services industry in such areas as industry statistics, government relations, legal representation, and communications with the financial community.

  - INPUT is a highly regarded international consulting services and marketing research company specializing in the information industry. INPUT has studied the information services industry since 1974 and maintains several ongoing research programs for the industry.

- INPUT's research programs supply information for this report in two ways:

  - INPUT's Company Analysis and Monitoring Program tracks 4,500 information services companies and specifically provides the data for this report on public companies and companies with over $10 million in annual information services revenues.

- INPUT's Market Analysis Program for the information services industry provides detailed forecasts for the next five years. Summary data from these forecasts are used in this report and the performance data obtained from users and vendors in this service is used to reconcile ADAPSO research findings.

- For the purposes of this report for ADAPSO, the industry is described as the "Computer Software and Services Industry." INPUT describes this industry as the "Information Services Industry."

- As in previous years, this report analyzes the computer software and services industry activities in terms of both mode of service and type of company.

  - "Mode of service" focuses on the end product—processing services, software products, professional services, or turnkey systems—in regard to the revenue sources of the vending companies. For this report the term "turnkey systems" is synonymous with last year's term "integrated systems."

  - "Type of company," on the other hand, is a means of classifying companies according to their primary source of revenue. For example, in this research, companies earning a majority of their revenues from processing services are classified as processing services companies, even though they may also receive revenue from sales of software products, professional services, or turnkey systems (see Appendix A for a list of definitions used in this report).

- The scope of the research for this year's report is essentially identical to that in the previous year's report, although a few adjustments were made. The major research activities included:

  - A census of all companies with more than $10 million annually in noncaptive U.S. information services revenue carried out as part of INPUT's continuing industry reserach.

- More than 400 companies were researched.

- Three-hundred-twelve (312) companies qualified for the final list and were included in the study.

- A stratified random sample of companies with annual revenue greater than $250,000 but less than $10 million in noncaptive U.S. information services revenue.

  - Over 300 companies were interviewed by telephone.

  - Two-hundred sixty-nine (269) companies met the criteria for inclusion in this report.

- The distribution of these companies by size and type of company is included as Exhibit I-1.

- Specific attention was paid this year to microcomputer-based companies and "traditional" companies with some portion of their revenue in one or more service modes derived from microcomputer products/services.

- Research was also performed on all publicly held, U.S.-based computer services companies.

  - Two-hundred-forty-three companies were analyzed.

  - Ninety-five (95) companies were selected for detailed analysis. The distribution of these companies by major type of service offered is included as Exhibit I-2.

  - To be included in this analysis, a company was required to derive at least 75% of its total revenue from information services with not more

than 25% of total information services revenue coming from foreign sources.

- This year for the first time vendors of Value-Added Network (VAN) services were included in this analysis.

- The reader should also note the following:

  - All references to revenue include only U.S. noncaptive computer software and service revenue unless otherwise indicated.

  - The data for this study were gathered from February to May of 1984.

  - Appendix B contains a reconciliation of figures reported in last year's report compared to those included in this year's report.

  - A data base of industry statistics is included in Appendix C.

  - A copy of the telephone interview questionnaire is included as Appendix D.

EXHIBIT 8:

METHODOLOGY USED IN INPUT'S VENDOR FINANCIAL WATCH

- The following is an excerpt from the most recent report.

I INTRODUCTION

- The Vendor Financial Watch (VFW) is a quarterly INPUT analysis of up-to-date financial reports of public information processing services, professional services, software products, and turnkey systems companies, both for comparative purposes (vendor to vendor) and to enable participants in a given sector of the information services market to monitor the overall growth of their sector.

- Each sector of the information services market is analyzed separately, both from a revenue and from a net income standpoint. The growth trends are analyzed in the last three columns of each data sheet in increasing calendar sequence; this is intended to provide an indication of the very latest developments in revenue and net income growth.

- Each information services market sector is also commented on separately, highlighting individual company successes and failures, and the trend in the market sector as a whole. The summary analysis at the back of the VFW report analyzes the comparative trends between sectors and comments on the trend of the total Information Services market. This section is particularly important since it identifies growth patterns very clearly.

- This quarterly Vendor Financial Watch report is intended as a planning tool for market planning executives and as an information newsletter for company executives. The data contained are extracted from published sources, annual reports, and 10-K reports, supplemented by INPUT's estimates (denoted by a * following a value) where data was not yet available from the company.

- This issue covers 100 information services vendors.

update: 4/1/85

II DATA REPORTED

- The VFW report is divided into two sections:
  - A summary of last quarter's acquisitions.
  - Information services companies' financial performance.
- Financial data provided includes each vendor's revenue and net income, reported on a calendar quarterly basis and comparisons on performance provided for:
  - 1984 versus 1983 (year on year);
  - Last calendar nine months' results compared to the year earlier period;
  - Last calendar six months' results compared to the year earlier period.
- Fiscal quarterly revenue is approximated to calendar quarterly revenue as follows:
  - Quarterly revenue reported as of February, March, and April is reported as Q1;
  - Quarterly revenue reported as of May, June, and July is reported as Q2;
  - Quarterly revenue reported as of August, September, and October is reported as Q3;
  - Quarterly revenue reported as of November, December, and January is reported as Q4.
- Fiscal year-end dates are provided in column 2 so that actual quarters for each company can be identified. Values that are followed by an asterisk (*) are INPUT estimates, pending release of the final results from the vendor. These are included so that the overall totals for each sector may be as complete as possible.

update: 4/1/85

EXHIBIT I-2

NUMBER OF COMPANIES IN PUBLIC COMPANY ANALYSIS
BY TYPE AND SIZE OF COMPANY

TYPE OF COMPANY	SIZE OF COMPANY		
	< $10 MILLION	≥ $10 MILLION	TOTAL
Processing Services	9	23	32
Software Products	2	20	22
Professional Services	1	24	25
Turnkey Systems	2	14	16
Total	14	81	95

EXHIBIT I-1

NUMBER OF COMPANIES IN RESEARCH BASE
BY TYPE AND SIZE OF COMPANY

TYPE OF COMPANY	SIZE OF COMPANY		
	< $10 MILLION	≥ $10 MILLION	TOTAL
Processing Services	91	120	211
Software Products	79	74	153
Professional Services	47	76	123
Turnkey Systems	52	42	94
Total	269	312	581

INPUT

PARK 80 PLAZA WEST-I • SADDLE BROOK, NEW JERSEY 07662 • (201) 368-9471

June 4, 1985

Mr. Robert Nolan, Jr.
c/o Mr. Ronald Rivenburg
6305 Ivy Lane - 3rd Floor
Greenbelt, MD 20770

Dear Bob:

Enclosed are three copies of the report (1 unbound for making further copies, if desired) plus three sets of an

- Executive Summary
- Analysis of Oil Company Performance
- Summary of Aggregate Billing Rate Changes

If you have any questions, please call.

I will send a draft of the respondent summary for your review shortly.

Sincerely,

Thomas O'Flaherty
Principal Consultant

TO'F:lg
Enclosure

EXHIBIT 1: COMPANIES INCLUDED IN THE TABULATIONS

- Arthur Andersen
- Arthur Young
- Price Waterhouse
- Coopers & Lybrand
- McAuto (Professional Services Division)
- CDC (Professional Services Group)

NOTE: THREE OF THE BIG 8 INTERVIEWS WERE WITH THE HOUSTON OFFICE

EXHIBIT 2: HOURLY RATES: OVERVIEW

	PROJ. MGR. SADAF PM	SYS. AN. I	COMP. SYSTEM AN	DB CONSULTANT	DB ADMIN., SW CONS.	SW. TECH., SYS. AN. II	APPL PROG 1	APPL PROG II
AVERAGE (MEDIAN) RATES								
1980	$135	$113	$97	$117	$117	$95	$80	$78
1983	$170	$145	$122	$148	$145	$125	$97	$97
1985	$167*	$151	$140	$154	$145*	$128*	$120	$97
HIGHEST AND LOWEST RATES								
1980	$105-150	$80-120	$62-105	$95-140	$100-120	$85-110	$60-102	$61-90
1983	$120-228	$97-160	$76-140	$120-175	$110-160	$98-140	$73-130	$69-113
1985	$131-220*	$100-175	$78-155	$140-175*	$125-160*	$120-150	$90-140	$85-125

* NO 1985 DATA YET AVAILABLE FOR VENDOR WITH THE HIGHEST 1983 RATE

EXHIBIT 3A: HOURLY RATES (DETAIL)

COMPANY	PROJ. MGR. SADAF PM	SYS. AN. I	COMP. SYSTEM AN	DB CONSULTANT	DB ADMIN., SW CONS.	SW. TECH., SYS. AN. II	APPL PROG I	APPL PROG II
A (HOUSTON BIG 8)								
1980	$125-145	$110-115	$85-110	$110-125	$110-125	$110	$90-115	$85-95
1983	$155-185	$140-150	$105-140	$140-155	$140-155	$140	$115-145	$105-120
1985	$170-200	$150-160	$115-150	$150-170	$150-170	$150	$125-155	$115-130
B (HOUSTON BIG 8)								
1980	$150	$120	$105	$95	$85	$85	$95	$85
1983	$200	$155	$140	$125	$110	$110	$125	$110
1985	$220	$175	$155	$140	$125	$125	$140	$125
* C (NAT'L OFFICE, BIG 8)								
1980	$135-205	$120	$95	$130	$120	$95	$60	**
1983	$180-275	$160	$125	$175	$160	$125	$80	**
1985								

* DATA FROM 1983 SURVEY ** TITLE NOT COMPARABLE

EXHIBIT 3B: HOURLY RATES (DETAIL)

COMPANY	PROJ. MGR. SADAF PM	SYS. AN. I	COMP. SYSTEM AN	DB CONSULTANT	DB ADMIN., SW CONS.	SW. TECH., SYS. AN. II	APPL PROG I	APPL PROG II
D (NAT'L COMP SVS FIRMS) ***								
1980	$105	$105	$105	$105	$100	$86	$64	$61
1983	$120	$120	$120	$120	$114	$98	$73	$69
1985	$140-155	$140-155	$140-155	$140-155	$140	$120	$90	$85
E (NAT'L COMP SVC FIRM)								
1980	$105	$80	$62	$140	$120	$105	$80	$70
1983	$127	$97	$76	$169	$145	$127	$97	$85
1985	$131	$100	$78	$175	$150	$131	$100	$88

*** MANAGERS NOT NORMALLY BILLED TO CLIENTS

EXHIBIT 3C: HOURLY RATES (DETAIL)

COMPANY	PROJ. MGR. SADAF PM	SYS. AN. I	COMP. SYSTEM AN.	DB CONSULTANT	DB ADMIN., SW CONS.	SW. TECH., SYS. AN. II	APPL PROG 1	APPL PROG I
F (HOUSTON BIG 8; SEE NOTE)								
1980	$110-145	$110-145	$75-110	$75-110	$75-110	$60-100	* *	$60-90
1983	$140-185	$140-185	$90-140	$90-140	$90-140	$75-130	* *	$75-110
1985	$150-200	$150-200	$100-150	$100-150	$100-150	$80-140	* *	$80-120

* * NO COMPARABLE TITLE

NOTE: RESPONDENT, PARTNER-IN-CHARGE, DID NOT KNOW DATA FOR 1980 OR 1983 OR EARLIER RATES OF INCREASE; AVERAGE PERCENT INCREASES FROM OTHER RESPONDENTS APPLIED.

EXHIBIT 4: BILLING RAGE CHANGES SINCE 1980 (1980=100)

	INDEX	YEAR-TO-YEAR INCREASE
1980	100	-
1981	110	10%
1982	119	8.2%
1983	127	6.7%
1984	132	3.9%
1985	137	3.8%

SOURCE: AVERAGE RATES OF INCREASES FROM RESPONDING VENDORS

EXHIBIT 5: SELECTED OIL COMPANY STATISTICS 1979-1983

	1979	1980	1981	1982	1983
"SEVEN SISTERS" (SHELL EXXON, MOBIL BP, TEXACO, SOCAL, GULF)					
REVENUES ($ BILL)	$340	$425	$450	$420	-
GROSS PROFIT ($ BILL)	$ 15	$ 23	$ 19	$13.5	-
PROFIT MARGIN					
DOMESTIC INTEGRATED	21.9%	20.9%	19.7%	20.0%	21.0%
INTERNATIONAL INTEGRATED (INCLUDES SHELL)	16.2%	12.7%	10.6%	10.3%	13.1%
SHELL					
GROSS REVENUES ($ BILL)	$14.5	$19.8	$21.7	$20.2	$19.9
NET REVENUES ($ BILL)	$ 1.1	$ 1.5	$ 1.7	$ 1.6	$ 1.6
RETURN ON EQUITY	16.1%	19.0%	18.4%	15.6%	14.4%

"SEVEN SISTER" DATA: THE ECONOMIST. OTHER DATA: S & P COMPANY AND INDUSTRY REPORTS, SHELL ANNUAL REPORTS.

EXHIBIT 6

PROFESSIONAL SERVICES COMPANY DATA

	ALL COMPANIES			PUBLIC	COMPANY
YEAR	NUMBER OF COMPANIES*	SALES ($BILL)*	YEAR TO YEAR SALES GROWTH*	PROFITS GROSS*	(%) NET**
1979	909	$2.9	26%	7.3%	N/A
1980	975	$3.7	27%	8.6%	N/A
1981	1,284	$4.5	21%	7.1%	2.6%
1982	1,348	$5.3	17%	N/A	3.3%
1983	1,400	$6.4	21%	N/A	3.6%
1984	N/A	$7.9**	24%**	N/A	3.9%

SOURCES: * = ADAPSO ANNUAL REPORTS 1980-1984

** = INPUT VENDOR FINANCIAL WATCH

EXHIBIT 7:

METHODOLOGY USED IN 1984 ADAPSO REPORT

- The following is an excerpt from the report itself.

- As noted, the methodology is substantially unchanged from prior years.

I INTRODUCTION

- This 18th annual report on the computer software and services industry has been prepared by INPUT under a commission from the Association of Data Processing Service Organizations (ADAPSO). It is designed for use by industry managers and financial analysts who wish to gain a fuller understanding of the size, growth, and trends of this important and rapidly changing industry.

  - ADAPSO consists of over 700 member companies and represents the interests of the computer software and services industry in such areas as industry statistics, government relations, legal representation, and communications with the financial community.

  - INPUT is a highly regarded international consulting services and marketing research company specializing in the information industry. INPUT has studied the information services industry since 1974 and maintains several ongoing research programs for the industry.

- INPUT's research programs supply information for this report in two ways:

  - INPUT's Company Analysis and Monitoring Program tracks 4,500 information services companies and specifically provides the data for this report on public companies and companies with over $10 million in annual information services revenues.

- More than 400 companies were researched.
- Three-hundred-twelve (312) companies qualified for the final list and were included in the study.

- A stratified random sample of companies with annual revenue greater than $250,000 but less than $10 million in noncaptive U.S. information services revenue.
  - Over 300 companies were interviewed by telephone.
  - Two-hundred sixty-nine (269) companies met the criteria for inclusion in this report.
- The distribution of these companies by size and type of company is included as Exhibit I-1.

- Specific attention was paid this year to microcomputer-based companies and "traditional" companies with some portion of their revenue in one or more service modes derived from microcomputer products/services.
- Research was also performed on all publicly held, U.S.-based computer services companies.
  - Two-hundred-forty-three companies were analyzed.
  - Ninety-five (95) companies were selected for detailed analysis. The distribution of these companies by major type of service offered is included as Exhibit I-2.
  - To be included in this analysis, a company was required to derive at least 75% of its total revenue from information services with not more

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- INPUT's Market Analysis Program for the information services industry provides detailed forecasts for the next five years. Summary data from these forecasts are used in this report and the performance data obtained from users and vendors in this service is used to reconcile ADAPSO research findings.

- For the purposes of this report for ADAPSO, the industry is described as the "Computer Software and Services Industry." INPUT describes this industry as the "Information Services Industry."

- As in previous years, this report analyzes the computer software and services industry activities in terms of both mode of service and type of company.

  - "Mode of service" focuses on the end product—processing services, software products, professional services, or turnkey systems—in regard to the revenue sources of the vending companies. For this report the term "turnkey systems" is synonymous with last year's term "integrated systems."

  - "Type of company," on the other hand, is a means of classifying companies according to their primary source of revenue. For example, in this research, companies earning a majority of their revenues from processing services are classified as processing services companies, even though they may also receive revenue from sales of software products, professional services, or turnkey systems (see Appendix A for a list of definitions used in this report).

- The scope of the research for this year's report is essentially identical to that in the previous year's report, although a few adjustments were made. The major research activities included:

  - A census of all companies with more than $10 million annually in noncaptive U.S. information services revenue carried out as part of INPUT's continuing industry reserach.

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EXHIBIT I-1

NUMBER OF COMPANIES IN RESEARCH BASE
BY TYPE AND SIZE OF COMPANY

TYPE OF COMPANY	SIZE OF COMPANY		
	< $10 MILLION	≥ $10 MILLION	TOTAL
Processing Services	91	120	211
Software Products	79	74	153
Professional Services	47	76	123
Turnkey Systems	52	42	94
Total	269	312	581

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EXHIBIT I-2

NUMBER OF COMPANIES IN PUBLIC COMPANY ANALYSIS
BY TYPE AND SIZE OF COMPANY

TYPE OF COMPANY	SIZE OF COMPANY		
	< $10 MILLION	≥ $10 MILLION	TOTAL
Processing Services	9	23	32
Software Products	2	20	22
Professional Services	1	24	25
Turnkey Systems	2	14	16
Total	14	81	95

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than 25% of total information services revenue coming from foreign sources.

- This year for the first time vendors of Value-Added Network (VAN) services were included in this analysis.

- The reader should also note the following:

  - All references to revenue include only U.S. noncaptive computer software and service revenue unless otherwise indicated.

  - The data for this study were gathered from February to May of 1984.

  - Appendix B contains a reconciliation of figures reported in last year's report compared to those included in this year's report.

  - A data base of industry statistics is included in Appendix C.

  - A copy of the telephone interview questionnaire is included as Appendix D.

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EXHIBIT 8:

METHODOLOGY USED IN INPUT'S VENDOR FINANCIAL WATCH

- The following is an excerpt from the most recent report.

I INTRODUCTION

- The Vendor Financial Watch (VFW) is a quarterly INPUT analysis of up-to-date financial reports of public information processing services, professional services, software products, and turnkey systems companies, both for comparative purposes (vendor to vendor) and to enable participants in a given sector of the information services market to monitor the overall growth of their sector.

- Each sector of the information services market is analyzed separately, both from a revenue and from a net income standpoint. The growth trends are analyzed in the last three columns of each data sheet in increasing calendar sequence; this is intended to provide an indication of the very latest developments in revenue and net income growth.

- Each information services market sector is also commented on separately, highlighting individual company successes and failures, and the trend in the market sector as a whole. The summary analysis at the back of the VFW report analyzes the comparative trends between sectors and comments on the trend of the total Information Services market. This section is particularly important since it identifies growth patterns very clearly.

- This quarterly Vendor Financial Watch report is intended as a planning tool for market planning executives and as an information newsletter for company executives. The data contained are extracted from published sources, annual reports, and 10-K reports, supplemented by INPUT's estimates (denoted by a * following a value) where data was not yet available from the company.

- This issue covers 100 information services vendors.

update: 4/1/85

II DATA REPORTED

- The VFW report is divided into two sections:
  - A summary of last quarter's acquisitions.
  - Information services companies' financial performance.
- Financial data provided includes each vendor's revenue and net income, reported on a calendar quarterly basis and comparisons on performance provided for:
  - 1984 versus 1983 (year on year);
  - Last calendar nine months' results compared to the year earlier period;
  - Last calendar six months' results compared to the year earlier period.
- Fiscal quarterly revenue is approximated to calendar quarterly revenue as follows:
  - Quarterly revenue reported as of February, March, and April is reported as Q1;
  - Quarterly revenue reported as of May, June, and July is reported as Q2;
  - Quarterly revenue reported as of August, September, and October is reported as Q3;
  - Quarterly revenue reported as of November, December, and January is reported as Q4.
- Fiscal year-end dates are provided in column 2 so that actual quarters for each company can be identified. Values that are followed by an asterisk (*) are INPUT estimates, pending release of the final results from the vendor. These are included so that the overall totals for each sector may be as complete as possible.

update: 4/1/85

EXHIBIT 9

TITLE TRANSLATION

INTERVIEW TITLE	INTERNAL TITLES-PER "PROFESSIONAL CLASSIFICATIONS"	SADAF TITLE(S) - TO BE USED IN REPORT
Superior to Account/ Field Manager	Director	Project Manager, SADAF Project Manger
Account/Field Manager	Field Manager	Systems Analyst I
Project Leader	Project Manager	Computer Systems Analyst
Principal Consultant	Principal Consultant	Data Base Consultant
Senior Consultant	Senior Data Base Consultant, Senior Consultant	Data Base Administrator, Software Consultant
Consultant	Consultant	Software Technician, Systems Analyst II
Systems Designer	Computer Systems Designer	Applications Programmer I
Senior Systems Analyst	Senior Consultant	Applications Programmer II

EXHIBIT 2: HOURLY RATES: OVERVIEW

	PROJ. MGR. / ~~SADAE PM~~	~~SYS. AN. I~~	COMP. SYSTEM AN	~~DB~~ CONSULTANT	~~DB ADMIN.,~~ / ~~SW CONS.~~	~~SW. TECH.,~~ / ~~SYS. AN. II~~	APPL PROG I	~~APPL PROG II~~
AVERAGE (MEDIAN) RATES								
1980	$135	$113	$97	$117	$117	$95	$80	$78
1983	$170	$145	$122	$148	$145	$125	$97	$97
1985	$167*	$151	$140	$154	$145*	$128*	$120	$97
HIGHEST AND LOWEST RATES								
1980	$105-150	$80-120	$62-105	$95-140	$100-120	$85-110	$60-102	$61-90
1983	$120-228	$97-160	$76-140	$120-175	$110-160	$98-140	$73-130	$69-113
1985	$131-220*	$100-175	$78-155	$140-175*	$125-160*	$120-150	$90-140	$85-125

* NO 1985 DATA YET AVAILABLE FOR VENDOR WITH THE HIGHEST 1983 RATE

EXHIBIT 3A: HOURLY RATES (DETAIL)

COMPANY	PROJ. MGR. ~~CADAF PM~~	SYS. AN. I	COMP. SYSTEM AN	DB CONSULTANT	DB ADMIN., SW CONS.	SW. TECH., SYS. AN. II	APPL PROG I	APPL PROG II
A (HOUSTON BIG 8)								
1980	$125-145	$110-115	$85-110	$110-125	$110-125	$110	$90-115	$85-95
1983	$155-185	$140-150	$105-140	$140-155	$140-155	$140	$115-145	$105-120
1985	$170-200	$150-160	$115-150	$150-170	$150-170	$150	$125-155	$115-130
B (HOUSTON BIG 8)								
1980	$150	$120	$105	$95	$85	$85	$95	$85
1983	$200	$155	$140	$125	$110	$110	$125	$110
1985	$220	$175	$155	$140	$125	$125	$140	$125
* C (NAT'L OFFICE, BIG 8)								
1980	$135-205	$120	$95	$130	$120	$95	$60	**
1983	$180-275	$160	$125	$175	$160	$125	$80	**
1985								

* DATA FROM 1983 SURVEY ** TITLE NOT COMPARABLE

EXHIBIT 3B: HOURLY RATES (DETAIL)

COMPANY	PROJ. MGR. ~~SADAF PM~~	SYS. AN. I	COMP. SYSTEM AN	DB CONSULTANT	DB ADMIN., SW CONS.	SW. TECH., SYS. AN. II	APPL PROG I	APPL PROG II
D (NAT'L COMP SVS FIRMS) ***								
1980	$105	$105	$105	$105	$100	$86	$64	$61
1983	$120	$120	$120	$120	$114	$98	$73	$69
1985	$140-155	$140-155	$140-155	$140-155	$140	$120	$90	$85
E (NAT'L COMP SVC FIRM)								
1980	$105	$80	$62	$140	$120	$105	$80	$70
1983	$127	$97	$76	$169	$145	$127	$97	$85
1985	$131	$100	$78	$175	$150	$131	$100	$88

*** MANAGERS NOT NORMALLY BILLED TO CLIENTS

EXHIBIT 3C: HOURLY RATES (DETAIL)

COMPANY	PROJ. MGR. ~~CHIEF PM~~	SYS. AN. I	COMP. SYSTEM AN.	DB CONSULTANT	DB ADMIN., SW CONS.	SW. TECH., SYS. AN. II	APPL PROG I	APPL PROG II
F (HOUSTON BIG 8; SEE NOTE)								
1980	$110-145	$110-145	$75-110	$75-110	$75-110	$60-100	* *	$60-90
1983	$140-185	$140-185	$90-140	$90-140	$90-140	$75-130	* *	$75-110
1985	$150-200	$150-200	$100-150	$100-150	$100-150	$80-140	* *	$80-120

* * NO COMPARABLE TITLE

NOTE: RESPONDENT, PARTNER-IN-CHARGE, DID NOT KNOW DATA FOR 1980 OR 1983 OR EARLIER RATES OF INCREASE; AVERAGE PERCENT INCREASES FROM OTHER RESPONDENTS APPLIED.

EXHIBIT 2: HOURLY RATES: OVERVIEW

	PROJ. MGR. ~~SADAF PMO~~	SYS. AN. I	COMP. SYSTEM AN	DB CONSULTANT	DB ADMIN., SW CONS.	SW. TECH., SYS. AN. II	APPL PROG 1	APPL PROG II
AVERAGE (MEDIAN) RATES								
1980	$135	$113	$97	$117	$117	$95	$80	$78
1983	$170	$145	$122	$148	$145	$125	$97	$97
1985	$167*	$151	$140	$154	$145*	$128*	$120	$97
HIGHEST AND LOWEST RATES								
1980	$105-150	$80-120	$62-105	$95-140	$100-120	$85-110	$60-102	$61-90
1983	$120-228	$97-160	$76-140	$120-175	$110-160	$98-140	$73-130	$69-113
1985	$131-220*	$100-175	$78-155	$140-175*	$125-160*	$120-150	$90-140	$85-125

* NO 1985 DATA YET AVAILABLE FOR VENDOR WITH THE HIGHEST 1983 RATE

EXHIBIT 3A: HOURLY RATES (DETAIL)

COMPANY	PROJ. MGR. ~~SADAF PM~~	SYS. AN. I	COMP. SYSTEM AN	DB CONSULTANT	DB ADMIN., SW CONS.	SW. TECH., SYS. AN. II	APPL PROG I	APPL PROG II
A (HOUSTON BIG 8)								
1980	$125-145	$110-115	$85-110	$110-125	$110-125	$110	$90-115	$85-95
1983	$155-185	$140-150	$105-140	$140-155	$140-155	$140	$115-145	$105-120
1985	$170-200	$150-160	$115-150	$150-170	$150-170	$150	$125-155	$115-130
B (HOUSTON BIG 8)								
1980	$150	$120	$105	$95	$85	$85	$95	$85
1983	$200	$155	$140	$125	$110	$110	$125	$110
1985	$220	$175	$155	$140	$125	$125	$140	$125
* C (NAT'L OFFICE, BIG 8)								
1980	$135-205	$120	$95	$130	$120	$95	$60	**
1983	$180-275	$160	$125	$175	$160	$125	$80	**
1985								

* DATA FROM 1983 SURVEY ** TITLE NOT COMPARABLE

EXHIBIT 3B: HOURLY RATES (DETAIL)

COMPANY	PROJ. MGR. SADAF PM	SYS. AN. I	COMP. SYSTEM AN	DB CONSULTANT	DB ADMIN., SW CONS.	SW. TECH., SYS. AN. II	APPL PROG 1	APPL PROG II
D (NAT'L COMP SVS FIRMS) ***								
1980	$105	$105	$105	$105	$100	$86	$64	$61
1983	$120	$120	$120	$120	$114	$98	$73	$69
1985	$140-155	$140-155	$140-155	$140-155	$140	$120	$90	$85
E (NAT'L COMP SVC FIRM)								
1980	$105	$80	$62	$140	$120	$105	$80	$70
1983	$127	$97	$76	$169	$145	$127	$97	$85
1985	$131	$100	$78	$175	$150	$131	$100	$88

*** MANAGERS NOT NORMALLY BILLED TO CLIENTS

EXHIBIT 3C: HOURLY RATES (DETAIL)

COMPANY	PROJ. MGR. SADAF PM	SYS. AN. I	COMP. SYSTEM AN.	DB CONSULTANT	DB ADMIN., SW CONS.	SW. TECH., SYS. AN. II	APPL PROG 1	APPL PROG II
F (HOUSTON BIG 8; SEE NOTE)								
1980	$110-145	$110-145	$75-110	$75-110	$75-110	$60-100	* *	$60-90
1983	$140-185	$140-185	$90-140	$90-140	$90-140	$75-130	* *	$75-110
1985	$150-200	$150-200	$100-150	$100-150	$100-150	$80-140	* *	$80-120

* * NO COMPARABLE TITLE

NOTE: RESPONDENT, PARTNER-IN-CHARGE, DID NOT KNOW DATA FOR 1980 OR 1983 OR EARLIER RATES OF INCREASE; AVERAGE PERCENT INCREASES FROM OTHER RESPONDENTS APPLIED.

(B)

CONFIDENTIAL

INPUT QUESTIONNAIRE

CATALOG. NO. AS P 9 0 0 3
SIC. CODE
SIZE CODE
AREA CODE
STUDY CODE
DATES 0 5 / 1 8 / 9 5
MM DD YY

STUDY TITLE:
TYPE OF INTERVIEW: ☐ VENDOR ☒ TELEPHONE
☐ USER ☐ ON-SITE
☐ MAIL

INTERVIEWER: Laura Tutsie

COMPANY: Coopers & Lybrand

CO. TYPE:

ADDRESS: 1100 Louisiana
Suite 4100
Houston, TX 77002

SALES:

NO. EMPL:

INDUSTRY ☐

☐ DISCRETE MANUFACTURING	☐ UTILITIES	☐ INSURANCE
☐ PROCESS MANUFACTURING	☐ RETAIL	☐ GOVERNMENT - FEDERAL
☐ TRANSPORTATION	☐ BANKING	☐ GOVERNMENT - STATE & LOCAL
☐ MEDICAL	☐ WHOLESALE	☐ EDUCATION
☐ SERVICES	☐ OTHER	

INTERVIEWS

NAME	TITLE	TELEPHONE NO.
Robin Vaughn	Administrative Mgr.	713-757-5200

SUMMARY

REFERENCES

PROFESSIONAL SERVICES PRICING PRACTICES: 1985

INPUT is a research and consulting firm in Saddle Brook, NJ. We are conducting a study on professional service firms' pricing practices. In return for your taking part in our study, we will send you a summary of both our new and old reports at no charge.

1. Is your professional service business nationwide or is most of your work conducted in particular geographic areas?

   (√) Nationwide

   ( ) Particular areas - Which ones?

   _____

   _____

   _____

   _____

2. Is each of the following customer or product areas a primary or secondary priority for your professional service activities?

	PRIMARY	SECONDARY
Commercial Accounts		✓
Government Accounts	✓	
Federal ADP	✓	
Federal Embedded Computer (Weapons) Systems	✓	
State and Local	✓	
Manufacturing Applications*	*	*
Banking and Finance Applications		✓
Health Care Applications		✓ moving up
Other (describe) Oil + Gas industry	✓	

* If primary or secondary manufacturing applications not checked, terminate interview.

3. If the average billing rates for your firm's management and technical staff equalled 100 in 1980, how would you see this index changing for your firm in each year up to 1985? Did you change your rates each year?

YEAR	INDEX	RATES CHANGES (CHECK)
1980	100	
1981	108	
1982	116	
1983	125	
1984	135	
1985	145	

Could not answer

4. Could you provide me with your current (1985) rates per hour for the following categories? We have defined each title as including specific years of experience; if you do not use exactly the same definition, please provide the rate for the closest title and tell me what your definition is. What were these titles' rates in 1980 and 1983 (if dollars not available, give % of current rate).

TITLE	YEARS*	TITLE VARIANCE	1985 RATE ($ PER HOUR)	1980 RATE	1983 RATE
Account/ Field Manager	10-5	Manager	175	DK	DK
Person whom Account/Field Manager Reports to (give typical title	15+	Partner	220		
Project Leader	7-10	Engagement Mgr.	155		
Principal Consultant (in a technical area)	10-15	Sr. Cons.	140		
Senior Consultant (in a technical area)	9-10	Cons.	125		

TITLE	YEARS*	TITLE VARIANCE	1985 RATE ($ PER HOUR)	1980 RATE	1983 RATE
Consultant (in a technical area)	8-10		125	DK →	
System Designer	7-10	SE	140		
Senior Systems Analyst	5-7	Cons.	125		
Systems Analyst	2-5	Cons.	125		
Senior Programmer	5-7	N/A			
Programmer	2-5	N/A			

*Not including education.

5. Do you have formal variations (either higher or lower) from your standard rates related to:

	YES	NO
• Application Type (e.g., manufacturing vs general commercial).	_____	✓
• Geographic Area	_____	✓
• Special Expertise	_____	✓
• Other (describe) _____	_____	_____

FOR ALL AREAS ANSWERED "YES," ASK:

- Why?
- Give some examples.
- How large is the variance?

5b. DESCRIPTION OF RATE VARIATION

AREA	REASON	EXAMPLES	SIZE OF VARIANCE
Application Type (e.g., manufacturing vs.general commercial			
Geographic Area			
Special Expertise			
Other Describe			

6. Do you ever give discounts from your standard rates?

(✓) YES ( ) NO

IF YES:

- Under what conditions? depends on length, financial cap. of client. Up to 75% (estimated actual 20-25% discount)

- How is this accomplished (e.g., reducing hourly rates, reducing billed hours, changing job categories, cost plus fixed fee)? reduce the hourly bill

- About how often does this occur? 80%

- About what percentage reduction from your standard rates is your typical discount? (May be one number or a range.) ~~15~~ 20-25%

7. When producing a fixed price proposal, do you use the same rate structure as used on T&M projects for project personnel?

(√) YES ( ) NO

IF NO, describe differences: _____

_____

_____

7b. Is a "surcharge" or "contingency factor" added to fixed price proposals over and above the result produced by your billing rate calculations (includes measuring number of hours)?

( ) YES (√) NO

IF YES, how much, on the average? _____

7c. Sometimes you may perform task-oriented engagements, even though they are billed on a T&M basis. Do you use the same billing rate as for straight T&M work?

(√) YES ( ) NO

Why? Our structure - same rates no matter what job is. Price competetive bids - adjust rate

If NO, discuss differences: _____

8. Do you furnish a schedule of professional service rates to prospective clients?

( ) YES ( ) NO Only in proposals

IF YES: Would you send INPUT a copy?

( ) YES ( ) NO will check

ATTACHMENT

PROFESSIONAL CLASSIFICATIONS

Account or Field Manager - Senior level manager who monitors performance against the scope of work, and contract schedules and plans. The project leader reports directly to this individual. Field managers provide the principal interface with the customer on contract performance and staffing. (10-15 years experience)

Project Leader - Plans, monitors and directs the efforts under a contract. Responsible for all on-site efforts, as well as customizing and off-site efforts. (7-10 years experience)

Principal Consultant - Top level consultant within a function (software, applications, operations, data base, communications, etc.) who is capable of advising senior management within the technical or functional organizations. (20-15 years experience)

Senior Consultant - Senior level individual who advises on specialized systems functions. (9-12 years experience)

Consultant - Individual who works directly with line and data processing organizations and uses specialized knowledge to develop methods and procedures for systems installation and implementation. (8-10 years experience)

System Designer - Individual who translates the functional design into the computer system design. (7-10 years experience)

(F)

CONFIDENTIAL

INPUT QUESTIONNAIRE

CATALOG. NO. Y 1 5 9 0 0 5
SIC. CODE
SIZE CODE
AREA CODE
STUDY CODE
DATES 0 5 2 4 8 5
MM DD YY

STUDY TITLE:
TYPE OF INTERVIEW: ☒ VENDOR ☐ USER ☒ TELEPHONE ☐ ON-SITE ☐ MAIL

INTERVIEWER: Laura Tatino

COMPANY: Arthur Young CO. TYPE:

ADDRESS: 2500 Texas Commerce Towers SALES:

Houston, TX 77002 NO. EMPL:

INDUSTRY ☐

☐ DISCRETE MANUFACTURING	☐ UTILITIES	☐ INSURANCE
☐ PROCESS MANUFACTURING	☐ RETAIL	☐ GOVERNMENT - FEDERAL
☐ TRANSPORTATION	☐ BANKING	☐ GOVERNMENT - STATE & LOCAL
☐ MEDICAL	☐ WHOLESALE	☐ EDUCATION
☐ SERVICES	☐ OTHER	

INTERVIEWS

NAME	TITLE	TELEPHONE NO.
Steve Greer	Partner in charge of Consulting Svcs	713-221-3000

SUMMARY

Houston area only

REFERENCES

CATALOG NO. YPSG

PROFESSIONAL SERVICES PRICING PRACTICES: 1985

INPUT is a research and consulting firm in Saddle Brook, NJ. We are conducting a study on professional service firms' pricing practices. In return for your taking part in our study, we will send you a summary of both our new and old reports at no charge.

1. Is your professional service business nationwide or is most of your work conducted in particular geographic areas?

( ) Nationwide

(✓) Particular areas - Which ones?

Houston

2. Is each of the following customer or product areas a primary or secondary priority for your professional service activities?

	PRIMARY	SECONDARY
Commercial Accounts	✓	
Government Accounts	✓	
Federal ADP	N/A	
Federal Embedded Computer (Weapons) Systems	N/A	
State and Local?	✓	
Manufacturing Applications*	✓ *	*
Banking and Finance Applications		✓ - Ron Houston
Health Care Applications	✓	
Other (describe)		

* If primary or secondary manufacturing applications not checked, terminate interview.

3. If the average billing rates for your firm's management and technical staff equalled 100 in 1980, how would you see this index changing for your firm in each year up to 1985? Did you change your rates each year?

YEAR	INDEX	RATES CHANGES (CHECK)
1980	100	
1981		Respondent was not a member of organization during these
1982		times. Refused or unable
1983		to respond.
1984		
1985		

4. Could you provide me with your current (1985) rates per hour for the following categories? We have defined each title as including specific years of experience; if you do not use exactly the same definition, please provide the rate for the closest title and tell me what your definition is. What were these titles' rates in 1980 and 1983 (if dollars not available, give % of current rate).

TITLE	YEARS*	TITLE VARIANCE	1985 RATE ($ PER HOUR)	1980 RATE	1983 RATE
Account/ Field Manager	10-5	Principal or Partner	150-200	DK	DK
Person whom Account/Field Manager Reports to (give typical title	15+	Partner	150-200		
Project Leader	7-10	Mgr. or Principal	100-150		
Principal Consultant (in a technical area)	10-15	Mgr. or Princ.	100-150		
Senior Consultant (in a technical area)	9-10	Manager	100-150	↓	↓

INPUT

TITLE	YEARS*	TITLE VARIANCE	1985 RATE ($ PER HOUR)	1980 RATE	1983 RATE
Consultant (in a technical area)	8-10	Consultant Manager or Principal	80-140	DK	~7
System Designer	7-10	N/A			
Senior Systems Analyst	5-7	Consultant	80-120		
Systems Analyst	2-5	Jr. Consultant	65-70		
Senior Programmer	5-7	N/A			
Programmer	2-5				

*Not including education.

5. Do you have formal variations (either higher or lower) from your standard rates related to:

	YES	NO
• Application Type (e.g., manufacturing vs general commercial).	_____	✓
• Geographic Area	_____	DK
• Special Expertise	_____	✓
• Other (describe) _____	_____	_____

FOR ALL AREAS ANSWERED "YES," ASK:

- Why?
- Give some examples.
- How large is the variance?

5b. DESCRIPTION OF RATE VARIATION

AREA	REASON	EXAMPLES	SIZE OF VARIANCE
Application Type (e.g., manufacturing vs.general commercial	_____	_____	_____
Geographic Area	_____	_____	_____
Special Expertise	_____	_____	_____
Other Describe	_____		
	_____		
	_____		

6. Do you ever give discounts from your standard rates?

(✓ YES ( ) NO

IF YES:

- Under what conditions? Varies with circumstances

- How is this accomplished (e.g., reducing hourly rates, reducing billed hours, changing job categories, cost plus fixed fee)? usually hourly rate

- About how often does this occur? We don't track, however it is not something we do often if it can be avoided

- About what percentage reduction from your standard rates is your typical discount? (May be one number or a range.) DK

7. When producing a fixed price proposal, do you use the same rate structure as used on T&M projects for project personnel?

(✓) YES ( ) NO

IF NO, describe differences: _____

_____

_____

7b. Is a "surcharge" or "contingency factor" added to fixed price proposals over and above the result produced by your billing rate calculations (includes measuring number of hours)?

( ) YES (✓) NO

IF YES, how much, on the average? _____

7c. Sometimes you may perform task-oriented engagements, even though they are billed on a T&M basis. Do you use the same billing rate as for straight T&M work?

(✓) YES ( ) NO

Why? _____

_____

_____

If NO, discuss differences: _____

_____

_____

8. Do you furnish a schedule of professional service rates to prospective clients?

( ) YES (✓) NO

IF YES: Would you send INPUT a copy?

( ) YES (✓) NO

ATTACHMENT

PROFESSIONAL CLASSIFICATIONS

Account or Field Manager - Senior level manager who monitors performance against the scope of work, and contract schedules and plans. The project leader reports directly to this individual. Field managers provide the principal interface with the customer on contract performance and staffing. (10-15 years experience)

Project Leader - Plans, monitors and directs the efforts under a contract. Responsible for all on-site efforts, as well as customizing and off-site efforts. (7-10 years experience)

Principal Consultant - Top level consultant within a function (software, applications, operations, data base, communications, etc.) who is capable of advising senior management within the technical or functional organizations. (20-15 years experience)

Senior Consultant - Senior level individual who advises on specialized systems functions. (9-12 years experience)

Consultant - Individual who works directly with line and data processing organizations and uses specialized knowledge to develop methods and procedures for systems installation and implementation. (8-10 years experience)

System Designer - Individual who translates the functional design into the computer system design. (7-10 years experience)

CONFIDENTIAL

(A)

INPUT QUESTIONNAIRE

CATALOG. NO. XSF9004
SIC. CODE
SIZE CODE
AREA CODE
STUDY CODE
DATES -MM DD YY

STUDY TITLE:
TYPE OF INTERVIEW: ☐ VENDOR ☐ USER ☑ TELEPHONE ☐ ON-SITE ☐ MAIL

INTERVIEWER: Laura Tutino

COMPANY: Price Waterhouse CO. TYPE:

ADDRESS: 1200 Milam SALES:

Houston, TX 77 NO. EMPL:

INDUSTRY ☐

☐ DISCRETE MANUFACTURING	☐ UTILITIES	☐ INSURANCE
☐ PROCESS MANUFACTURING	☐ RETAIL	☐ GOVERNMENT - FEDERAL
☐ TRANSPORTATION	☐ BANKING	☐ GOVERNMENT - STATE & LOCAL
☐ MEDICAL	☐ WHOLESALE	☐ EDUCATION
☐ SERVICES	☐ OTHER	

INTERVIEWS

NAME	TITLE	TELEPHONE NO.
Peter Powell	Partner	713-654-4100

SUMMARY

REFERENCES

PROFESSIONAL SERVICES PRICING PRACTICES: 1985

INPUT is a research and consulting firm in Saddle Brook, NJ. We are conducting a study on professional service firms' pricing practices. In return for your taking part in our study, we will send you a summary of both our new and old reports at no charge.

1. Is your professional service business nationwide or is most of your work conducted in particular geographic areas?

   (✓) Nationwide

   ( ) Particular areas - Which ones?

   _____

   _____

   _____

   _____

2. Is each of the following customer or product areas a primary or secondary priority for your professional service activities?

	PRIMARY	SECONDARY
Commercial Accounts	✓	
Government Accounts	✓	
Federal ADP	✓	
Federal Embedded Computer (Weapons) Systems		
State and Local	✓	
Manufacturing Applications*	✓*	*
Banking and Finance Applications	✓	
Health Care Applications	✓	
Other (describe)		

* If primary or secondary manufacturing applications not checked, terminate interview.

3. If the average billing rates for your firm's management and technical staff equalled 100 in 1980, how would you see this index changing for your firm in each year up to 1985? Did you change your rates each year?

YEAR	INDEX	RATES CHANGES (CHECK)
1980	100	
1981		follow inflation
1982		
1983		
1984		
1985		

4. Could you provide me with your current (1985) rates per hour for the following categories? We have defined each title as including specific years of experience; if you do not use exactly the same definition, please provide the rate for the closest title and tell me what your definition is. What were these titles' rates in 1980 and 1983 (if dollars not available, give % of current rate).

TITLE	YEARS*	TITLE VARIANCE	1985 RATE ($ PER HOUR)	1980 RATE	1983 RATE
(2) Account/ Field Manager	10-5	Sr. Mgr.	150-160		
(1) Person whom Account/Field Manager Reports to (give typical title	15+	Partner	170-200		
(3) Project Leader	7-10	Manager	115-150		
(4) Principal Consultant (in a technical area)	10-15	Sr. Manager	150-170		
(5) Senior Consultant (in a technical area)	9-10	Same	150-170		

TITLE	YEARS*	TITLE VARIANCE	1985 RATE ($ PER HOUR)	1980 RATE	1983 RATE
(1) Consultant (in a technical area)	8-10	Sr. Mgr.	150		
(2) System Designer	7-10	Mgr.	125-155		
(3) Senior Systems Analyst	5-7	Mgr.	115-130		
Systems Analyst	2-5	Sr. Consultant	90-110		
Senior Programmer	5-7	Mgr.	115-130		
Programmer	2-5	Sr. Cons	80-90		

*Not including education.

5. Do you have formal variations (either higher or lower) from your standard rates related to:

	YES	NO
• Application Type (e.g., manufacturing vs general commercial).	____	✓✓✓✓
• Geographic Area	slight	✓✓✓
* • Special Expertise	✓	✓✓✓✓
• Other (describe) _____	____	____

FOR ALL AREAS ANSWERED "YES," ASK:

- Why? - cost of living
- Give some examples. - Geog. - Houston vs. Indianapolis - com. could be higher in Houston
- How large is the variance? - DK

* Expertise - telecomm. specialists welfare well paid are good

5b. DESCRIPTION OF RATE VARIATION

AREA	REASON	EXAMPLES	SIZE OF VARIANCE
Application Type (e.g., manufacturing vs.general commercial	_____	_____	_____
Geographic Area	_____	_____	_____
Special Expertise	_____	_____	_____
Other Describe	_____		
	_____		
	_____		

6. Do you ever give discounts from your standard rates?

(/) YES ( ) NO

IF YES:

- Under what conditions? Case by case business decision if worth investment to get follow on work

volume
size
vol

- How is this accomplished (e.g., reducing hourly rates, reducing billed hours, changing job categories, cost plus fixed fee)? "discount off bill"

- About how often does this occur? ~~Rare~~ 10-15%

Ok 80%, 35%

- About what percentage reduction from your standard rates is your typical discount? (May be one number or a range.) 5 to all the way to charitable work.

15%

Ok 20-25

no typ

7. When producing a fixed price proposal, do you use the same rate structure as used on T&M projects for project personnel?

(✓) YES (✓) NO

IF NO, describe differences: _____

_____

_____

7b. Is a "surcharge" or "contingency factor" added to fixed price proposals over and above the result produced by your billing rate calculations (includes measuring number of hours)?

(✓) YES ( ) NO

IF YES, how much, on the average? 10% it depends on each situation.

7c. Sometimes you may perform task-oriented engagements, even though they are billed on a T&M basis. Do you use the same billing rate as for straight T&M work?

(✓) YES (/) NO

Why? -1 set of rates-

If NO, discuss differences: _____

8. Do you furnish a schedule of professional service rates to prospective clients?

( ) YES / ( ) NO could give a range

IF YES: Would you send INPUT a copy?

( ) YES / (✓) NO

ATTACHMENT

PROFESSIONAL CLASSIFICATIONS

Account or Field Manager - Senior level manager who monitors performance against the scope of work, and contract schedules and plans. The project leader reports directly to this individual. Field managers provide the principal interface with the customer on contract performance and staffing. (10-15 years experience)

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Principal Consultant - Top level consultant within a function (software, applications, operations, data base, communications, etc.) who is capable of advising senior management within the technical or functional organizations. (20-15 years experience)

Senior Consultant - Senior level individual who advises on specialized systems functions. (9-12 years experience)

Consultant - Individual who works directly with line and data processing organizations and uses specialized knowledge to develop methods and procedures for systems installation and implementation. (8-10 years experience)

System Designer - Individual who translates the functional design into the computer system design. (7-10 years experience)

DSS-3555 (7/84)

AGENCY USE ONLY

CASE STATUS	REGULAR GRANT	SUPPLEMENTAL GRANT	ADDITIONAL BENEFIT GRANT
☐ Approved ☐ Denied			

VENDOR CODE	GRANT AMOUNT	DOCUMENTS ATTACHED
		☐ Yes ☐ No

CERTIFIER SIGNATURE	DATE	SUPERVISOR SIGNATURE	DATE

BATCH #

DSS-3555 (7/84)

HEAP
Home Energy Assistance Program

HOME ENERGY ASSISTANCE MAIL-IN APPLICATION
NEW YORK CITY
1984 - 1985

If you are 60 years of age or older **or** receive SSI and live alone **or** receive Social Security disability benefits, complete this Application Form, sign it, and mail to:

HEAP - DEPT. FOR THE AGING
280 Broadway - Room 501
New York, New York 10007
577-0276

CONTROL #	
ID	REF

DIRECTIONS

1. **PLEASE PRINT CLEARLY.**
2. Be sure to fill out the form **completely** and **accurately.**
3. **BE SURE TO SIGN THE FORM ON PAGE 3.**
4. Mail this application to the Agency listed above.
5. Si Usted Necesita un Formulario en Español, Llame AL 334-9774.

SECTION ONE: HOUSEHOLD COMPOSITION

1. **My name:**

Last	First	M.I.	2. Date of Birth Mo.	Day	Year	3. Social Security Number

4. **My address:**

Street No.	Street	Apt. No.	City	County	State	Zip Code

5. **My mailing address (Leave blank if same as above):**

Street No.	Street	Apt. No.	City	County	State	Zip Code

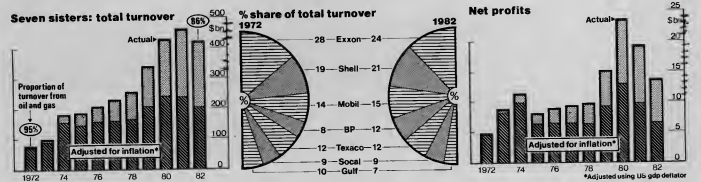
6. **List telephone number where you can be reached (_____) _____**

7. **Total number of people who live in your household INCLUDING YOURSELF _____**

8. **List the requested information for all members of your household OTHER THAN YOURSELF:**

	LAST NAME	FIRST NAME	M.I.	DATE OF BIRTH	SOCIAL SECURITY NUMBER
79	14.5	1.1			
80	19.8	1.5			
81	21.7	1.7			
82	20.2	1.6			
83	19.9	1.6			
84	20.9	1.8			

WORLD BUSINESS
AFTER THE OPEC DECADE



Seven sisters who lost family control

On October 16, 1973, members of the Organisation of Petroleum Exporting Countries (Opec) announced their cartel's first unilateral price increase—a 70% rise in the cost of a barrel of oil to $5.12. The 10 years since the first Opec price shock have been as traumatic for oil companies as for their customers. Where will the oil business be 10 years from now?

Giants like Exxon, which regularly reports corporate profits of over $1 billion a quarter, are in no danger of quick extinction. There are six oil companies in the world's corporate top 10; 15 in the top 30. But size in itself has costs as well as benefits. Becoming corporate dinosaurs is the fate big oil is now struggling to avoid.

In the 1970s, Opec stripped big oil of ownership of most of its petroleum reserves and production. The cartel also broke the industry's grip on oil markets, and soaring prices dampened demand for oil and increased demand for alternative sources of power. Companies were sheltered from these realities by profits on the back of Opec price rises, and were distracted by the day-to-day problems of dealing with price shocks and supply shortages. With oil markets stable, at least temporarily, the companies no longer have either this shelter or distraction.

They now have to focus on a stark choice: whether to become international utilities (under the thumb of both Opec and oil-consuming governments) or to take their chances in the marketplace—battling not only with each other but also with governments and Opec for more freedom to compete.

In the past, the oil industry has had it both ways. The big companies administered the market (with the help of the American congress and other friendly regulators) and created an umbrella under which smaller companies and wildcatters could compete for riches. Today's markets will not allow that. Opec now has more influence on oil prices (because it manipulates production) than do the companies, while the free market is at last starting to have more influence than either. At the same time oil exploration is fast becoming a game so expensive that only the big and rich can play. So, although oil men instinctively want stability and security, they are becoming resigned to greater competition.

The companies are learning that to stay big in today's markets they have to think small. They are breaking up monolithic companies into separate profit centres. They have to, because of:

● **High crude oil prices.** Expensive crude is good for an oil company's producing operations, but terrible for its refineries. With the biggest oil companies now buying in about half their crude at (still high) official Opec prices, they have to break production and refining/marketing into separate profit centres in order to balance the costs and benefits.

● **Taxation and regulation.** The governments of oil-importing countries reacted to Opec's manipulation of production and prices in the 1970s. They slapped high taxes on oil companies' soaring profits and, in many places, handed down new rules to ensure oil supply. Each country has its own approach, and each guards its local oil companies and oil supply jealously. To prosper, the regional managers of the big oil multinationals need more flexibility to work with host governments, which means more freedom from head office control.

Even as they prepare for competition, however, oil men are dreading the possible consequences. Regional and line profit centres competing in freer markets threaten to increase fluctuations in the prices of refined products, and even of crude oil. The turmoil of the past decade has already created more uncertainties in oil markets than the companies feel comfortable with; more confusion, they say, would make it next to impossible to plan the multi-billion dollar investments their industry requires.

More important, decentralised profit centres are no guarantee that parent companies will stay big. Opec members have taken away the big companies' oil reserves, and—without price rises to swell income—even the biggest have begun to shrink a bit.

In 1972, seven giant oil companies—the seven sisters: Exxon, Mobil, Texaco, Standard Oil of California (Socal), Royal Dutch/Shell, Gulf and British Petroleum (BP)—owned over half the non-communist world's reserves. They produced two thirds of its crude and provided three fifths of its refined petroleum products.

By 1982, the seven sisters owned barely a tenth of the non-communist world's oil reserves, and produced less than a fifth of its oil. By buying crude from newly nationalised suppliers, they still provided about two fifths of the non-communist

ic, CSX, Burlington Northern and Norfolk Southern. All are regional: none spans the continent.

Southern Pacific sought a merger after the federal regulator, the Interstate Commerce Commission (ICC), gave its blessing in October, 1982, to the merger of Union Pacific and Missouri Pacific. SP's chairman, Mr Benjamin Biaginni, says his company has been losing $100m a year in revenue owing to that merger.

In the light of its planned merger with SP, Santa Fe's approaches this summer to Conrail were, until Mr Schmidt's statement this week, regarded as a smokescreen. The purpose, it was thought, was to prevent speculators bidding up the price of SP's shares and to deter bids for Santa Fe itself from, for example, its powerful western rival, Burlington Northern.

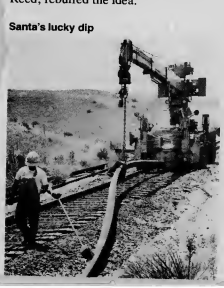
Merging railways is a lengthy affair in America. Although shareholders of Santa Fe and SP may voice approval before the end of the year, the ICC may take much longer. It has pondered for about two years in previous cases. But the government is keen to sell Conrail, so, if Mr Schmidt's interest is genuine, the regulators might be asked to hurry up.

Conrail is not a bad buy: since June, 1981, it has refrained from drawing down federal funds (although it still owes taxpayers $3.3 billion in government loans). And it is making a profit.

So far only one buyer for Conrail has stepped forward: its employees. They have bid a miserly $500,000, throwing in wage and benefit concessions worth about $1.6 billion to the government. But if, despite the challenge of digesting SP, Mr Schmidt were to make a bid, others would surely emerge: Norfolk Southern, the big eastern railway whose business might be squeezed by the link-up, for one.

Mr Schmidt's approaches to Conrail are not the first fidgets towards a coast-to-coast railway. Last year, Norfolk Southern discussed a merger with Santa Fe. Mr Schmidt's predecessor, Mr John Reed, rebuffed the idea.

Santa's lucky dip



Civil aircraft

Airbus gets up Boeing's nose

Europe's Airbus Industrie is challenging both its government shareholders and rival aircraft makers. The consortium announced on Tuesday, October 11th, that British Caledonian Airways (BCal) will be a launch customer for its new 150-seat aircraft, the A320.

So far, the A320 exists only on paper. If BCal is to get its seven aircraft by 1988-89 (it has options for another three) the French, British, West German and Spanish partners in Airbus will need launch aid from their governments. Airbus is betting that the BCal order will loosen government purse strings. If it is right, Airbus's American rivals, Boeing and McDonnell Douglas, will face a dilemma. Do they risk financial disaster by investing some $3 billion in new aircraft programmes to compete with the A320, or do they surrender a potentially lucrative market to the Europeans?

Airbus reckons that some 3,000 aircraft in the 100-175 seat range could be sold by 2000 to replace aircraft being retired for reasons of age, noise or inefficiency. And Airbus knows that if it fails to produce aircraft in that range—at the moment its products are all big, widebodied aircraft—it will be missing a share of a market worth perhaps $70 billion.

Those calculations have not carried much weight with debt-burdened airlines. Orders have gone to "old-technology" aeroplanes offered on concessionary terms or cut-price leases by Boeing and McDonnell Douglas. Airbus was depressed by the lack of interest in a 150-seater shown by the German carrier Lufthansa, and then made even glummer when British Airways last month chose to lease from Boeing despite all manner of sweeteners offered by Airbus.

BCal's $240m order has helped lift the gloom, not least because it is a private-sector airline that takes decisions on commercial grounds. Previous orders for the A320 were all from state-owned Air France and its sister, Air Inter.

Firm orders for only 42 aircraft are barely enough for the launch of a programme whose payback depends on sales of around 400 aircraft. But Mr Roger Béteille, Airbus's general manager, detects signs of interests at last from Lufthansa, and he expects to get an Asian order for the A320 by the end of the year.

In the meantime, Airbus is lobbying hard. So is British Aerospace (BAe) which is seeking $450m-600m from the British government to support its risk-bearing share of 20% in the Airbus consortium. BAe (which builds wings for Airbus) is telling Mrs Thatcher's ministers that around 8,000 British jobs would be involved in the A320. If the British government supports the project, the West German government seems certain to follow—and there has never been any doubt about the French government's commitment.

None of this will please the Americans. Boeing reckons Airbus has already received over $5 billion in subsidies from Europe's taxpayers. It says that it gives more subcontracting jobs to Britain's workers than Airbus does. Mr Béteille retorts that launch aid is being repaid with every aircraft sale and that Boeing gets subsidies from defence contracting.

The Americans are also agitated by Airbus's qualities. Although Boeing has recently beaten Airbus to widebody orders from Quantas and Japan Air Lines, the A320 will be, by Airbus's calculations, at least 18% more fuel efficient than the 737-300 being offered by Boeing and derived from its existing 737 series. And it will be 28% more efficient than the slightly larger MD-80 series from McDonnell Douglas. Those advantages will grow still greater if the A320, which will go into service with an engine made by America's General Electric and France's Snecma, later gets an all-new engine from an international consortium headed by Pratt & Whitney of America and Britain's Rolls-Royce.

"The optimism I expressed at the last Annual General Meeting has been more than justified, with profit before taxation climbing to a half-year level of £4.1 million. This compares with £1.1 million in the first six months and £3.2 million in the whole of 1982. An interim dividend of 2.5p per share (1982: 2p per share) has been declared.

Group auction sales have improved by 40% to £119 million (£85 million in the first half of 1982).

The Group continues to give high priority to controlling expenditure and in the period under review, Group expenditure after allowing for the variation in currency rates has increased by just over 5%.

The regeneration of confidence in the international Art Market which has been under way for some twelve months is continuing. In every part of the world where we operate there are encouraging signs of an upturn in business. While forecasting results of auction sales can prove a hazardous occupation, I am confident that we will have another good Autumn season resulting in an overall record for 1983."

(Extract from the Chairman's statement 4 October 1983)

J A Floyd CHAIRMAN

INTERIM STATEMENT

Consolidated Profit and Loss Account
for the period ended 30 June 1983

£000	6 Months to 30.6.83 Unaudited	6 Months to 30.6.82 Unaudited	12 Months to 31.12.82
Turnover	21,152	16,324	35,076
Profit before taxation	4,126	1,122	3,191
Profit after taxation	1,661	492	1,155
Earnings per share	7.96p	2.39p	5.45p

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- Interest credited four times a year means an even higher return because the interest itself earns interest for you. So the current rate, if maintained, equals 9.57%.
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FRANCE TELEX 210393 **GREECE** TELEX 212766 **HONG KONG** TELEX HX 61672 **JAPAN** TELEX 28292
SWITZERLAND TELEX 812186 **U.K.** TELEX 885361 **U.S.A.** TELEX 233563 **USSR** TELEX 413258 **W. GERMANY** TELEX 416500

world's petroleum products that year. But demand for those products is still falling—as are the profits from selling them.

In 1962-72, demand for petroleum products grew by 8% a year. Oil company profits rode sedately in its wake. Net profit of the 25 big oil companies monitored by Chase Manhattan bank grew by 6% a year over that period.

Opec's price rises transformed the profit picture—to big oil's advantage. In 1972-80, net profits of the Chase 25 grew by an average of 23% a year. They would have risen even faster had not western governments imposed new taxes. Price rises, however, hit demand. In 1979-82, the free world's oil demand fell by an average of 5% a year. Profits sagged. The sisters are still flush with cash today, but cash flows are stagnating so there will not be more money to throw around tomorrow.

In 1982, Exxon, Mobil, Gulf and Socal chalked up current-cost accounting losses. They try to shrug them off, just as they do the small but annoying losses from such 1970s diversifications as Mobil's acquisition of Montgomery Ward, the Chicago-based department-store group, and Exxon's of Reliance Electric.

Meanwhile, in the seven sisters' main business, rivals can now get oil direct from Opec members. Even the Saudis, who once channelled all of their vast production through the four Aramco partners (Mobil, Exxon, Texaco and Socal), now offer oil to all-comers through a new marketing company called Norbec. The cosy old world of oil—in which the sisters supplied everybody with crude oil and in which interlocking, long-term contracts kept the industry stable—is gone.

Without the stability provided by interdependence, the companies face untrammelled competition. So far, habit and fear have largely kept the companies together in a herd, and there have only been squabbles, promoted by the sisters' smaller cousins. Conoco, long ago a terrible infant in the family, started yet another petrol price war in Britain in 1982 to increase market share. Arco did the same in the western United States. Still bloodier battles could well start soon.

Markets get tougher

Oil companies are marshalling their forces for an outbreak of competition in the downstream, refining and marketing end of their businesses, already the most competitive part. Operations are being slimmed. Refineries are being adapted to cope with a wider variety of crudes and turn out more profitable products. Petrol-station chains are being concentrated in the areas where the companies hold the biggest advantage.

There are several reasons why refining and marketing will become even more competitive than it is today:

- **Stagnant markets.** Few forecasters expect dramatic rises in oil demand in the industrial countries. Recovery may lift consumption by, say, 1-2% a year above 1983's trough of 45m-46m barrels a day (b/d). Some even expect continued decline in Europe. With refineries in most areas already working at less than 70% of capacity, and often losing money, many companies are trying to increase their market shares.
- **Strategy.** Downstream market share still gives companies an advantage when negotiating deals over crude. That is more important than ever for companies' long-term well-being. The non-communist world's oil companies on average buy in two fifths of their crude from Opec suppliers. This percentage is expected to increase.
- **Profits.** As companies lose the privilege of making big money from oil production, they have to look to their downstream operations for increased profits. But there is only a limited amount of downstream business to go round.
- **Changing consumption.** Outside the United States (the world's biggest oil market), oil product markets are changing fast. Everybody is using less energy. But industrial consumers and homeowners are also switching to alternative fuels—like natural gas, coal and electricity. Lorry- and car-drivers, on the other hand, are stuck with diesel and petrol. So consumption of "heavy" products used by industry and homeowners, like fuel oil, is declining relative to light products like petrol. In the EEC, for example, fuel oil accounted for 27% of the refined oil products sold in 1982, versus 37% in 1972. Refineries are limited in the products they can produce—and old refineries produce the wrong products—so this creates opportunities for better-equipped competitors.
- **Changing supplies.** As companies scramble for low-cost crude supplies, the types of crude available to refiners are changing. Refineries which can transform cheap, gunky crudes into petrol and diesel are at an advantage. This, too, creates opportunities for competition.
- **New competitors.** The 10 member states of the Organisation of Arab Petroleum Exporting Countries plan nearly double their refining capacity. Though some projects are being delayed as revenues to pay for them fall, they will eventually provide extra competition for

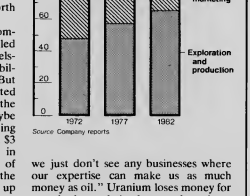
Diversification gets homelier

Five years ago, even the most conservative of the seven sisters was diversifying into coal and synfuels. The more ambitious took on a hodge-podge of minerals, paper-making, electronics and other non-oil businesses. Now the emphasis is back on oil (preferably in North America).

The change in emphasis is not complete, though. Companies have pulled out of their big shale-oil and synfuels-from-coal projects, like Exxon's $7 billion Colony venture in Colorado. But they are still polishing up their patented processes before shelving them for the day when they might be needed—maybe in the late 1990s. Some are still putting money into coal. Exxon is building a $3 billion coal export mine and dock in Colombia. And with only a couple of exceptions—eg, Shell's pull-out from the General Atomic joint venture set up with Gulf—companies are hanging on to their 1970s energy acquisitions.

The companies still want to keep a stake in all energy sectors because they reckon oil's share of energy markets will continue to decline. But this is a long-term bet. Their experience so far confirms the judgment of Texaco's chairman, Mr John McKinley. He says: "We've looked at all the alternatives and we just don't see any businesses where our expertise can make us as much money as oil." Uranium loses money for everybody, and, in depressed markets, returns on coal are slim.

The biggest headache is still chemicals, which are losing money for most producers. Oil companies are trying to give their chemicals divisions the same treatment as refineries: slim, invest to improve efficiency and shift output into more valuable, and better-selling, specialty chemicals.



Trading gets spottier

The old trading system of long-term interlocking contracts has been smashed by Opec. So the big oil companies have found another way of doing business: the ramshackle collection of short-term deals known as the spot market.

Compared with other commodity markets, the oil spot market looks a joke. It has no trading floor, although traders are concentrated in Houston and Rotterdam, near big American and European refining centres. Dealing is done by telephone or telex. Prices for each tankerful of crude sold are seldom known to anyone other than the buyer and seller. Even information on who is buying or selling passes by rumour.

Companies are in two minds about the opaqueness of the market. They like the secrecy that surrounds their own dealings. The less information anyone has about their activities, they reckon, the more chance they have to take advantage of slower-witted rivals and traders.

But the market's opaqueness also means that they have no hard information on what the middlemen are up to. The small traders who handle most spot deals make more money when prices are fluctuating. Unlike brokers in the stockmarkets or most other commodity markets, they own the products they trade and profit from speculation rather than commission. The big companies do not worry about small price fluctuations of, say, a dollar or so a barrel. It is the larger ones scare them. The multi-billion dollar capital investments they have to make in production and refining are too big to trust to an opaque market that can turn tail fast.

Nobody knows how much spot prices will fluctuate under today's conditions if a new crisis jolts oil markets out of their present tranquillity. In past crises, they have swung wildly. But the market was much smaller then, accounting for less than 5% of the non-communist world's oil. Amid the price uncertainty of 1982-83, the spot market has grown to account for more than a fifth—and perhaps as much as two fifths—of the non-communist world's oil supplies. Will deeper waters run stiller?

Yes, say the spot market's proponents, who further argue that the emergence of crude-oil futures trading will eventually make spot price fluctuations less worrying to the industry because they will let companies hedge. The oil companies are still dubious—particularly about crude oil futures.

None the less, many companies have come to rely on the spot markets. BP sets about half its crude from them. And 1982 Gulf Oil increased the volume of third-party spot market deals (ie, deals made for profit rather than Gulf's own supply) by nearly three times over to 215,000 barrels a day. Producers have joined in too. Saudi Arabia is now offering up to 500,000 barrels a day (b/d) of spot crude.

The four Aramco partners—Exxon, Mobil, Texaco and Socal—who used to own as well as to operate most of the Saudi oil wells do not need to trade on the spot market. Though Aramco was nationalised in 1980, the partners are still contracted to take the vast majority of Saudi Arabia's huge crude output. Now that prices are stable, and other Opec member countries have stopped undercutting the Saudi price, they profess themselves well satisfied with the arrangement.

Even if other companies become disillusioned with the spot market, they will balk at returning to long-term links with Opec suppliers. No other producer has proved as reliable as Saudia Arabia, and, so long as there is plenty of crude about, companies do not want to tie themselves down on price and supply.

Getting the right mixture

There is an alternative: so-called "evergreen" contracts. These guarantee supply within a range but call for frequent price reviews. They tie the purchaser to a single supplier—rather than letting spot-market traders take the risk of default on supply—but allow more security of supply than spot deals (which often guarantee delivery of no more than a tankerful of crude). This makes it easier for the companies to negotiate sales contracts.

However they finally decide to do business, the companies will leave the whip hand over prices to Opec. They have no choice. Opec holds two thirds of the non-communist world's oil reserves and now produces 18m-18.5m b/d of its 45m-46m b/d total crude supply, and its share will increase as western reserves and production run down. Although they resent Opec's power, oilmen are quietly rather glad that the cartel is around today to bear the pain and ignominy of holding a floor under prices.

In theory, oil companies could use their huge buying power to influence Opec and the price by, for example, buying crude for stockpiles to firm prices and by destocking to soften them. But the companies say they cannot. They are too big and clumsy. Although sceptics see a conspiracy in every boardroom, evidence backs the companies' statement. They desperately wanted the Opec price agreement of March, 1983, to succeed, but put pressure on the agreement by continuing to destock until August.

Repairing the ceiling

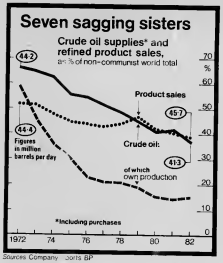
What would change everything is an Opec bust-up. Given the cartel's show of unity on price and production quotas in the months following last March's meeting in London nobody is seriously planning for the cartel's demise. Even so, it is a possibility oilmen cannot afford to ignore.

The Saudis are the key to Opec's present price-administering arrangement. They agreed in London to make up the difference between the rest of Opec's production and the cartel's overall production ceiling of 17.5m b/d. What ministers fudged was whether or not the Saudis had the right in supporting the price to produce more than the 5m b/d difference between the rest of Opec's collective quotas and the 17.5m b/d ceiling—which is exactly what they are doing now that total demand for Opec oil has risen above 18m b/d.

This puts the cartel in a bind. It does not want to raise the overall ceiling now because it reckons it would then have to lower it again next spring after the peak demand of the northern hemisphere winter. This would create the prospect of new rows over both sharing out the extra production and lowering the ceiling. The rows could weaken the markets' faith in Opec to hold prices.

Yet several Opec member countries resent the Saudis' interpretation of their role as "swing producer". When every member wants to sell more oil, they do not see why the rich Saudis should get the extra bits of production. Oil companies will watch the Opec meeting this December carefully to see how well the cartel can come together to solve these problems.

A variety of compromise solutions are being canvassed. For instance, fluctuating quotas to cope with seasonal swings in demand. With the Iran-Iraq war and other problems on its hands, the companies are not sure that Opec will find the compromises easily.



the established oil companies.

The companies' strategies for becoming competitive are similar. First, close redundant old plants. In 1980-82, BP reduced its European refining capacity by about 30%, Shell by 19%, Mobil by 16%, Exxon by 11% and the rest of the industry by 9%.

In America, in the same period, Exxon cut its refining capacity by 10%, Texaco by 12%, Arco by a whopping 21%, Mobil by 6% and the industry as a whole by about 6%. This year the cuts are expected to be deeper, with American refiners closing a further 6% of their capacity.

The second step is to improve remaining refineries by investing in one of the several technologies which can squeeze more light products, like petrol, out of a barrel of even gunky crude. At many companies, downstream capital expenditure is reaching record levels—even though capacity is being reduced.

The third part of most strategies is to redeploy assets to concentrate a company's strength on profitable markets. Sleepy country petrol stations are being boarded up. Better a cluster of high-volume stations surrounding a refinery or distribution terminals, because clustering keeps distribution costs low. Better yet, locate the whole lot in a growing market—like America's suburban sunbelt or the sprawling fringes of big European cities.

In America, Gulf pulled out of both the west coast and the midwest; Texaco withdrew from much of the Rocky Mountains and midwest; and Amoco topped the 1982 petrol-station-closure league table when it eliminated operations in 11 states.

Socal and Gulf pulled out of European refining nearly completely this year when refineries were operating at less than 60% of capacity. Also, the rising dollar (in which oil is priced) wiped out the spring crude price cut in many countries and decimated already meagre profit margins.

Reserves get rarer

Big oil is finding it harder to discover new oil, but consumers are in no danger of shortage. Total non-communist reserves are increasing, and, even if the companies stopped finding new oil, most would have enough reserves to keep up 1982 production levels for 10-12 years.

Much of the new crude, though, is controlled by countries, not companies. Over the past five years, the 17 American-based oil companies studied by Mr Dillard Spriggs of Petroleum Analysis, a New York consultancy firm, pumped more oil out of the ground than they found new oil. Mobil was least profligate of the 17, replacing 81% of its production. But Exxon replaced less than three quarters of its production worldwide; Socal only half and Texaco barely one third.

What frustrates the companies is their conviction that the oil is out there somewhere. The non-communist world's proved oil reserves are rising towards their 1975 peak of 601 billion barrels. This year they total an estimated 585 billion barrels.

Since much of that oil, including nearly all of the 369 billion barrels of proved reserves in the Middle East, is beyond the reach of the companies they have stepped up their efforts elsewhere.

The 17 tripled exploration expenditure worldwide in the five years to 1982, to $14 billion. The seven sisters are concentrating on exploring the "frontiers"—places where little oil has yet been found. They are leaving to their smaller relatives the relatively accessible, but small and unrewarding, finds around existing fields. This year, big oil's frontiersmen are to be found in the South China sea—where BP and a joint venture between Shell and Exxon recently signed deals with the Chinese government—the North American Arctic and offshore California, where nearly everybody is hoping to get a look in.

The rewards are potentially huge. The South China sea could contain some 30 billion-40 billion barrels; every company dreams of a discovery like Sohio's giant Prudhoe Bay field in Alaska.

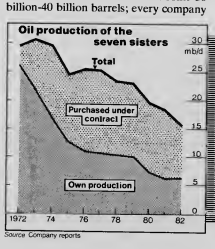
But the costs match the dreams. BP is committed to drill up to 20 wells over the next three years exploring its 14,000 square kilometres of the waters off South China. In the Arctic Beaufort Sea, the explorers first step towards finding oil is typically to spend about $60m building an artificial island that they can use for drilling operations. Whether oil is found or not, such islands are abandoned and left to wash away when the exploratory drilling is over.

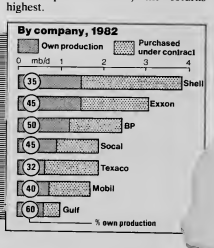
Despite technological improvements, Exxon's exploration costs per barrel of oil found rose from $1.80 in 1978 to more than $5.00 in 1982; Texaco's from $1.60 to $9.50; and Socal's from $4.60 to more than $12. Production costs have risen, too—by over 40% a year from 1978-82 for most companies.

Taxation, though, is still the big determinant in the economics of oil production. In America, Exxon had average production costs of about $8 a barrel and Texaco of $8¼ in 1982. Miscellaneous costs were about half as much again a barrel. From an average selling price of about $28.50 a barrel, Exxon kept, after tax, about $3 in profit and Texaco $3.50.

Elsewhere, though, taxes are often more burdensome. With costs rising, the companies say they cannot make any money on some of the new fields. Though Britain, Nigeria, Canada and the United States have cut their take of production revenues, the companies say they need still-lower taxes.

Glut gives the companies the freedom to make good their threats not to develop less attractive fields. Exxon and Mobil pulled out of Libya when Colonel Qaddafi turned a deaf ear to their complaints. And nearly everybody in the industry is pushing their exploration and development money towards America, where the political environment is sympathetic, geological prospects good and, the companies believe, the returns highest.





INTERVIEW TARGETS

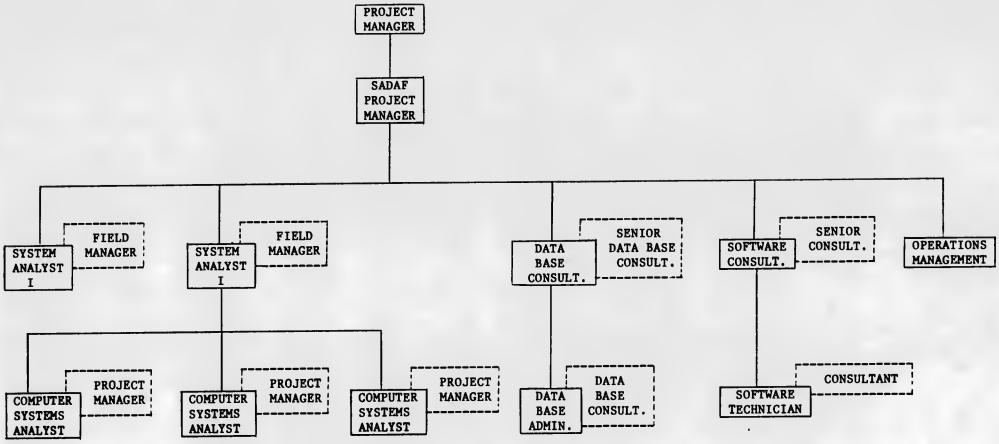
Previously interviewed:

EDS
GEISCO
LTI
McAuto
Arthur Andersen
CDC

New Targets:

Coopers & Lybrand
Peat, Marwick
Arthur Young
Price Waterhouse
Deloitte Haskins & Sells
Booz Allen
Boeing Computer Services

SADAF



SYS. ANALYST II (FSD)
APPLICATION PROGRAMMER I (CSD) [redacted]
APPLICATIONS PROGRAMMER II (CUSTOMIZER) SENIOR CUSTOMIZER

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$$108$$
$$20$$

INPUT

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May 6, 1985

Mr. Robert F. Nolan, Jr.
Martin Marietta Data Systems
6305 Ivy Lane, 3rd Floor
Greenbelt, MD 20770

Dear Bob:

I found our meeting on Friday was very useful. I am sending for your information, several of the things that we have produced here as a result of our meeting:

- o The questionnaire, as revised.
- o A list of interview targets.
- o A title translation list.

As we agreed, we will endeavor to get the interviews performed as soon as possible; we will not wait until we have completed three interviews before laying the groundwork for the remaining interviews (e.g., making initial contacts, etc.).

We will complete the fourth and subsequent interviews as soon as possible and not delay by waiting for a formal go-ahead for Phase 2. (If, for whatever reason, you would decide not to go forward with all phases, you should notify us as soon as possible to limit expenditures in later phases.)

By the way, while it was not made explicit, I am assuming that our meeting last Friday was in lieue of one of the on-site days described under Phase 3.

I will give you a telephone progress report as soon as we have tangible results, but not later than Monday, May 13. We are very sensitive to your need to have the final results by May 24. We will make every effort to do so before that date. Because of the difficulty in finding one of the limited number of people knowledgeable on these subjects within the target organizations, as we discussed we could fall an interview or two short of our numeric goals in order to complete the report on schedule; I will keep you apprised of this.

We have started the interview process today (I don't have anything to report yet). Please call if you have any questions.

Sincerely,

Thomas O'Flaherty
Principal Consultant

/kt

Enc.

cc: Robert F. Nolan

PROFESSIONAL SERVICES COMPANY DATA

	ALL COMPANIES				
YEAR	NUMBER OF COMPANIES*	SALES ($BILL)*	YEAR TO YEAR SALES GROWTH*	PUBLIC PROFITS GROSS*	COMPANY (%) NET**
1979	909	$2.9	26%	7.3%	N/A
1980	975	$3.7	27%	8.6%	N/A
1981	1,284	$4.5	21%	7.1%	2.6%
1982	1,348	$5.3	17%	N/A	3.3%
1983	1,400	$6.4	21%	N/A	3.6%
1984	N/A	$7.9**	24%**	N/A	3.9%

SOURCES: * = ADAPSO ANNUAL REPORTS 1980-1984

** = INPUT VENDOR FINANCIAL WATCH

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SOURCES: * = ADAPSO ANNUAL REPORTS 1980-1984

** = INPUT VENDOR FINANCIAL WATCH

PROFESSIONAL SERVICES COMPANY DATA

	ALL COMPANIES			PUBLIC	COMPANY
YEAR	NUMBER OF COMPANIES*	SALES ($BILL)*	YEAR TO YEAR SALES GROWTH*	PROFITS GROSS*	(%) NET**
1979	909	$2.9	26%	7.3%	N/A
1980	975	$3.7	27%	8.6%	N/A
1981	1,284	$4.5	21%	7.1%	2.6%
1982	1,348	$5.3	17%	N/A	3.3%
1983	1,400	$6.4	21%	N/A	3.6%
1984	N/A	$7.9**	24%**	N/A	3.9%

SOURCES: * = ADAPSO ANNUAL REPORTS 1980-1984

** = INPUT VENDOR FINANCIAL WATCH